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THE ARCHITECTURAL REVIEW MARCH 1944

BRAZIL

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# The Architectural Review

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**SUBSCRIPTION RATES:**  
United Kingdom, £1 5s. 0d.  
per annum, post free. U.S.A.,  
\$8 per annum, post free. Else-  
where abroad, £1 5s. 0d. per  
annum, post free. An index  
is issued every six months,  
covering the period January to  
June, and July to December,  
and can be obtained without  
charge on application to the  
publishers.

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**THE COVER** The most celebrated of all Brazil's spectacles is, of course, the Bay of Rio, which provides a theatrical setting for the capital of the country, and is one of Nature's gifts to photographers. They have not been slow to respond, but it is doubtful if a greater view of Rio has been taken than this, by the same photographer who has recorded the buildings which follow. G. E. Kidder Smith, the American architect who, with Philip L. Goodwin, was sent to Brazil by the Museum of Modern Art in New York, to make a record of the Modern Movement there. Brazil Builds was one of the results. This special number is another. The map above shows the position of the places mentioned in the issue.

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Vol. XXV No. 567  
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There is not much doubt that this war will prove, in the word of Mr. Churchill, a climacteric, initiating among other new orders a rearrangement of the Balance of Power. One of the new forces to be reckoned with may be the third largest political entity in the Western Hemisphere, with over forty millions of people and three million square miles of territory, Brazil, a country larger than the United States.\* Brazil has suddenly produced a new architecture and this, coupled with the fact that a Brazilian Architectural Exhibition is shortly to be opened in London, has evoked this Special Issue of THE ARCHITECTURAL REVIEW. There is an introductory survey by J. de Sousa-Leão, who is a Counsellor at the Brazilian Embassy in London. Mr. Sacheverell Sitwell, our greatest English expounder of the Baroque, deals with the architectural history of the country. And the modern movement which has so suddenly blossomed is recorded by word and camera by Mr. G. E. Kidder Smith, of the American Institute of Architects, who was recently commissioned by the Museum of Modern Art in New York to visit Brazil for this purpose. With two or three exceptions, all the photographs which follow are his, and those who remember the Swedish issue (April, 1943), also largely his work, will agree that Mr. Kidder Smith is proving himself one of the great architectural photographers of our time. To the Museum of Modern Art in New York and to the Brazilian Embassy in London, without whose help this issue would not have been possible, special acknowledgments and thanks are due.

\* Mr. A. A. Berle, the United States Assistant Secretary of State, speaking to-night, said that the relative strength of the countries of the world had not only changed already but would change still more strikingly in the next 25 years.

"In our lifetime," he said, "the United States will have stabilized, western Europe will have stood still—if, indeed, it has not actually begun to decline—Soviet Russia will be headed for a considerably greater population which in time will outnumber all of western Europe combined."

Mr. Berle estimated that the United States, which in 1940 had a population of 135,000,000, might perhaps increase at a much slower rate. Great Britain, with about 46,000,000, would drop to 42,000,000 and probably stop there. Germany, with 69,000,000, would probably drop to 64,000,000 and gradually diminish. France, with 41,000,000, would probably fall to 37,000,000. Soviet Russia, with a population of 175,000,000 in 1940, would rise to 222,000,000 and probably increase steadily for a long time.

Brazil, he said, had doubled her population in less than a quarter of a century. Brazil alone, therefore, in the next generation, will be not merely a great South American country, but a world Power if she so chooses.

The Times, February 8, 1944.

# BRAZIL: THE BACKGROUND

By J. DE SOUSA-LEÃO

BRAZIL was discovered by the Portuguese in 1500. Its settlement began in 1532, that is about one hundred years before Virginia and New Amsterdam, when the country was divided in fifteen hereditary Captaincies, the future States of the Union. In spite of Brazil's vast area, spreading over the South American Continent for more than three million square miles, the world has only lately begun to realize the possibilities of this country of over forty million inhabitants.

It was first known for its dye wood, which gave the country its name. The seventeenth century saw the spread of sugar cultivation—a valuable colonial product, of which Brazil became the largest producer. Then followed the gold cycle, during which she supplied the world with more of the precious metal than it had ever possessed. When this had run its course, cotton and tobacco were to be the main resources, with ups and downs, until coffee superseded them, in the second half of the nineteenth century. This quick succession of economic periods with its continued temporary dependence on one crop accounts for the slow material progress of the land during the three first centuries of her national existence. Another cause was Portugal's rigid colonial policy—a policy pursued by all the other European countries in their possessions overseas as well.

After the loss of their Indian Empire, the Portuguese clung zealously to Brazil, since it was from this, their last remaining asset of real value, that the Crown derived its main sources of revenue. This feat of colonizing and holding together such a gigantic country against the French and the Dutch, with the scant population of Portugal, was nothing short of a miracle. A price had to be paid. Brazilian ports remained closed to international trade until 1808, when the Portuguese King removed his Court to Rio.

Later with the advent of the industrial revolution, it was the lack of coal and oil that has made Brazil trail behind the United States.

As the bare million inhabitants to which Portugal was reduced, after the Napoleonic wars, did not warrant a place suitable to her rank at the Congress of Vienna, an ingenious solution was found when João VI raised his colony of Brazil to the level of the Mother Country by the creation of a United Kingdom, of which Rio became the seat of government. This solution proved in time to be highly beneficial to Brazil. It led, when the movement for independence came in 1822, to João's son, Pedro, becoming the first Brazilian Emperor. It spared the country the civil struggles which the Spanish Vice-Royalties had to undergo, when breaking off from the Mother Country. It gave Brazil the stability of a sixty-year monarchical regime. The unity thus assured saved the country from breaking up into several parts, as had been the case with Spanish America. And it made it possible for Brazil to get safely through the difficult passage from a slave-ridden country to a model democracy, which the Republic inherited in 1889 from the magnanimous hands of the second Emperor. The liberalism of a model parliamentary Government was enjoyed by Brazilians of the mid-nineteenth century, based on the English two-party system, which withstood successfully two foreign wars and derived its strength from a central authority and the Emperor's moderating power.

The Republic in 1889 changed this system into a Federation of States, patterned in some measure on the United States of America. This subdivision of authority was a challenge to the preceding order, and found the country unprepared. The interests of each individual State became paramount, and national problems such as

transport, legislation, health and education ceased to be viewed on national lines. Political and economic rivalries between States became a threat to the unity of the nation. The results of Presidential elections were often disputed by the defeated candidates or by the group of States behind them. A general dissatisfaction, together with an impending threat of foreign ideologies, brought about the 1937 *coup d'état*, on the lines of Salazar's authoritarian democracy, by which much of the autonomy of the States was withdrawn by the Central Authority. The political structure of the nation is now undergoing a period of trial. The final decision, as the Government has promised, rests with the people, who will determine, after the war, in conformity with Brazilian realities, what shape it is to assume—a fitting recognition of their deeply ingrained personal freedom.

To give a short description of a country as large as Brazil is not an easy task. Travelling by land and by sea, with the existing facilities, a year would be required to cover it, whilst a couple of weeks suffice to fly over it in all directions. Such are the possibilities introduced by aviation for countries of the size of Brazil. While progress was at the pace of the mule-pack or at best of the narrow-gauge railway, in the interior, it was bound to be slow; now, however, if the country becomes air-minded, its development may step up to the speed of the aeroplane. Also the best way to see Brazil is by air, and so I will attempt a flying description of the country.

The first landing place for the international plane coming from Miami is Pará, a pleasant city lined with mango trees, on the mouth of the Amazon. It occupies a key position, due to the fact that it is the starting point for the whole Amazon system as far as Peru in

the West, Venezuela in the North, and Bolivia in the South, thus linking this vast hinterland with the wide Atlantic. Two huge churches, several forts and an imposing Governor's Palace, built in the 18th century by the brother of the great Pombal, show that the Portuguese were well aware of the possibilities of the place, both from the point of view of trade and of strategy. They are confirmed by present-day facts and will become more and more important as time goes on.

The scenery from the air is a wonderful experience. The display of the enormous masses of clouds, dense with tropical rain or glaring under the sun, patches of dark, steaming forest below, tremendous storms and torrential downpours are the most outstanding impressions one receives flying up-river towards Manaus. The city unexpectedly appears from the middle of the jungle with no roads to indicate its approach and no suburban area—just the city with its squares, its grand Opera House and its floating docks, the remains of a former prosperity: the days of the rubber boom. Further on, the same aspects, the same muddy waters, a few villages and huts on the bends of the river, the unbroken forest everywhere, relieved only here and there by some scant clearings. And so the forest rolls on towards the foothills of the Andes to the West and the rocky-plateau of the Guyanas to the North, where at last rapids and grass lands break the monotony of the sombre green, picturesquely enhanced by flocks of gaily painted birds, such as toucans, macaws and herons of all colours.

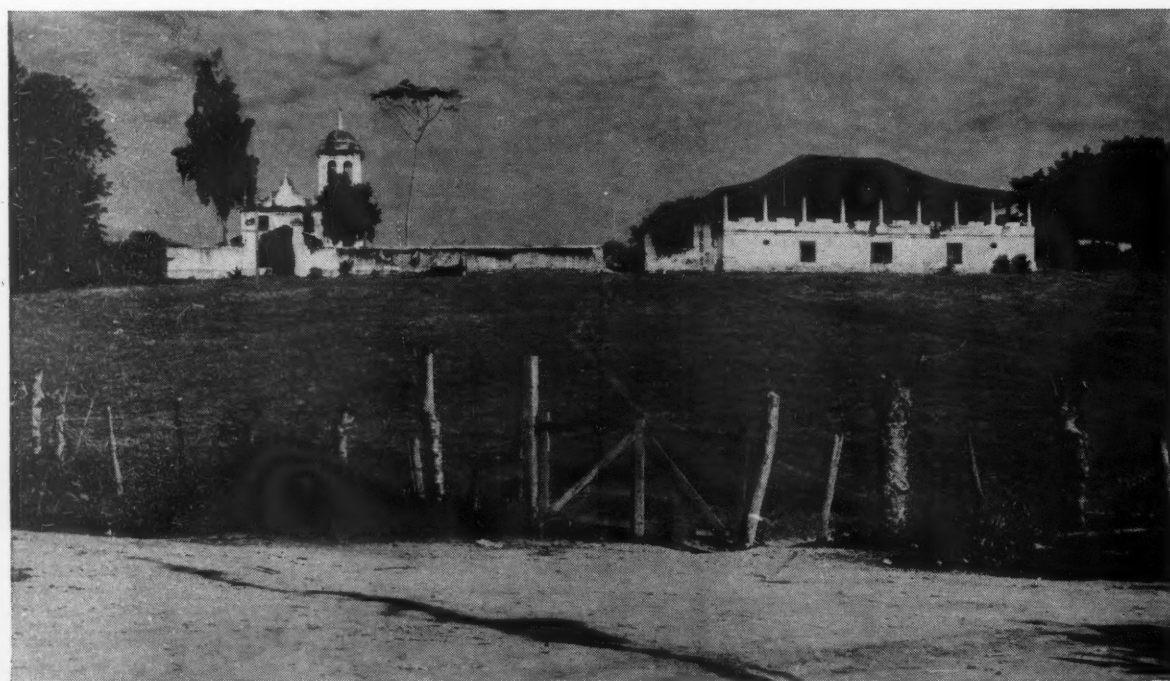
From Belem down the coast, the plane soars for two hours over many small rivers, with sandy banks and shallow anchorages, which oblige ships to keep at a distance, until it strikes the natural harbour of São Luis, the capital of the State of Maranhão, where Admiral Cochrane, commanding the

The facing page: Brazil is one of Nature's variations on a fantastic theme. No scenic artist would dare to conceive the dramatic contrasts of actual Brazilian landscape. The Bay of Rio, for instance, is one of the world's most astonishing panoramas, which provides for Rio de Janeiro, the capital, a setting which can really be described only by the word "glamorous." In the photograph opposite, the city can be seen fringing the various lagoons of the bay. Every building is enhanced by the scenery, and the architects have made impressive use of their opportunities as the following pages show. Even the prosaic job of levelling a road evokes, in Brazil, something of the fabulous. The strange sugar-loaf stalagmites in the other photograph are no natural phenomena. Shaded from deep red down to pale yellow, they are earthen yardsticks, left by the local contractor to show the depth of his excavations. The great new highway to Belo Horizonte required much digging and levelling. The top-soil, with a few grasses and wild plants, now sky high on the old ground level, is left temporarily as proof of work done when settlement day arrives. A map on the contents page gives the position of the places described in the articles which follow.





The fifth largest country in the world, Brazil has three dominant colours: white, gold and black, symbolising the three powerful influences on the country: the Church, Gold and the Negro. In four centuries Brazil has emerged from the most primitive origins by the successive stages of kingdom, empire and republic, and now stands revealed, in these pages, as one of the most highly civilized of modern democracies. Building has chiefly followed the highlands and coastal plains. In the hotter and greater part of the country, where the rainfall can mount to 8 ft. a year, towns are fewer. An obstacle to architecture and road development is the ever-encroaching forest which, although it could provide unlimited timber, is not employed for building. Stone has been the favoured material, characteristically decorated by fine Portuguese tiles. The more flamboyant of the Baroque churches seem to be trying to assert their vitality against the overwhelming exuberance of nature, while the country houses, farms and warehouses in their more sober, restrained outlines, provide contrast in its most dramatic form. Below, a typical Brazilian country scene, the Fazenda Colubandé is an example of the early nineteenth century country ranch. These great plantations produce sugar, coffee, cocoa and oranges, and would never have been possible without slave labour. The raised basement supports a colonnade. Sheds and workers' houses adjoin the enclosed court leading up to the chapel, set amongst trees. Above, Rio harbour and city, and below these, Salvador, where Jesuit missionaries settled in 1549, when the first Governor-General Tomé de Sousa chose the city's site. In the port the docks and warehouses are particularly striking, with broad gables.



new Brazilian Fleet, besieged the last Portuguese garrison in 1824. Here one sees barges with sails of every colour being loaded with tropical produce. A Baroque cathedral and a large convent stand out against the narrow streets, dotted with chapels and colonial balconies. In the time of the sailing ships, São Luis was the seat of the Government for Northern Brazil, as it was easier to sail with the prevailing winds to Lisbon, than to the capital of the Vice-Roys, either at Salvador or Rio. São Luis was actually founded early in the seventeenth century by French privateers and was named after Louis XIII.

Proceeding south, the landscape changes. The white chequer boards of the salt pans sparkle along the coast, cattle graze on the plains, and here and there cotton plantations appear. Then comes Fortaleza, with its geometrical flat pattern, in the arid section of the bulge of Brazil, and Natal, now famous as the jumping-off ground for the transatlantic air-service. Its proximity to Africa and the favourable climatic conditions prevailing all the year round make it a permanent and important international air-junction.

Then, through hundreds of miles of coconut groves and red cliffs, the plane swoops down upon palm-fringed and sun-baked City of Pernambuco. A curious reef stretching for miles, parallel to the coast, forms here a natural dock. The heights of nearby Olinda and the spires of its churches make a delightful landmark for the ships that seek the harbour. The rich, almost greasy soil is ideal for sugar cane. Two rivers converge on Pernambuco, contributing to its most characteristic aspects: quays and canals everywhere, above which the tiled and coloured façades of the old houses cast their reflections in the jade-green water. Pernambuco is rich in tradition. Portuguese and Dutch forts, ornate churches in profusion, together with the convents of Olinda, give it the distinction of being one of the four centres of colonial art in Brazil. Lovely cloisters lined with the famous Portuguese blue tiles, gilt altars and the heavily carved furniture are the main features that attract the lover of Baroque art. Pernambuco has also played an important part in the seventeenth century wars against the Dutch, who at one time succeeded in ruling this part of the world under one of the Nassau princes. Attracted by the rural prosperity of the captaincy, they remained there for twenty-five years—a period of incessant fighting, during which the nation was forged.

The titled proprietors of the sugar plantations were the most gifted members of the two political parties that governed the country during the Empire and counted amongst the influential orators in the Senate at Rio. They lived with a considerable degree of refinement on their country estates and were proud of their horses and carriages. They traced their descent from the best Portuguese blood, and their elegant manners were a reflection of the same easy and cultured life as that led by the wealthy planters of the American Southern States or the British West Indies.

The next halt is at Maceió. Sugar, cotton fields and coconut palms on the fringe of the sea is practically all one sees for another two hours, until one reaches Salvador, in the magnificent Bay of All Saints, a lovely and sheltered harbour as no other in the globe. As the one-time capital of Portuguese America the city has preserved, more than any other in Brazil, its old-world atmosphere. It is above all noted for the number of its





churches and monasteries, and for this reason remains the most suggestive, the most Brazilian of our cities, past and present. It is divided into a lower part—the busy trading centre—and an upper part—beautifully set out overlooking the bay.

Bahia is proud and full of dignity, conscious of the nation she has mothered, of the Portuguese traditions she has preserved, and of the spiritual sway she continues to exercise over the hearts of all Brazilians. The town was formerly the main slave market. Hence the omnipresence of negroes and their own particular way of life—indolent, soft people, dancing at voodoo gatherings or praying in religious processions, an inextricable mixture of Saint and Witch Doctor. These two aspects which stamp Brazilian life are best expressed in that great popular revelry, the carnival. The negroes' haunting songs and their highly spiced cooking have left their mark in Brazil everywhere. The dresses of the Bahia women are the inspiration of our artists.

The next flight takes one over a thousand miles, along a continuous coastal chain, to the modern airport of Rio, right in the heart of the city. No more advantageous view of the whole bay can be obtained than by air. From above, all its beauties join in a single panoramic sweep. Long white beaches in graceful curves, lush green islands and the serried rank of the tall residential blocks of Copacabana rise in brilliant colours like the creation

of a surrealist. The town, so different from any other, nestles in the valleys, follows the broken contours of the beaches in endless strings of jewels, on a most lovely setting. The well-known beauties of its harbour need not be described. What must be pointed out here, however, is that Rio undergoes a vast plan of reconstruction. Stately Government buildings, sky-scrapers and palatial flats spring up everywhere. A vast avenue was torn right through the centre of the town, as wide and longer than the Champs-Élysées; diagonals are foreseen to ease the traffic congestion.

From Rio two air-lines branch inland; one to Belo Horizonte, the comparatively new capital of Minas Geraes and the other to São Paulo, the coffee and industrial centre.

The first flight takes one over abrupt, rocky mountains to the plateau of Minas—a heart of gold locked in a breast of iron, as someone once called it. Around the capital are the gold mines, one of which, the St. John d'El Rey, has been in operation since colonial days. From them derives the name of Minas Geraes. They were discovered by the Paulistas, those famous *bandeirantes* who played such a part in exploring and appropriating the vast uninhabited spaces of Brazil, with total disregard of the Pope's line of demarcation between Spain and Portugal.

From Belo Horizonte motor roads branch to the ancient mining towns,



One of the glories of Brazil, the town of Ouro Preto (Black Gold), surrounded by bleak mountains. The town flourished by the discovery of gold at the end of the eighteenth century, and languished by the failing of the gold some years later. The colour of the sandstone quarried here and used in most of the many beautiful churches is also a deep gold. Also, at Ouro Preto, is the small countrified Baroque chapel of São José, below. The top pictures are typical Brazilian scenes at Olinda and Petropolis, where the "Empire" was re-born.





to-day little more than ghost-towns, but once in the eighteenth century by far the greatest producers of gold. In these towns the usual gold-rush instead of developing into rough collections of shacks, with vice and gambling rampant, was held with firm hand by the State and the Church. The King's collectors were exacting and penalties for evasion were savagely carried out. All ostentation on the part of his subjects was frowned on by His Majesty. Only the churches were allowed to display the riches of the district. A characteristic Baroque sprang up in these mountains, forming one of the greatest ensembles of old architecture in South America. The most notable Brazilian colonial artists: in sculpture, the versatile Antonio Francisco Lisboa, better known as the "Cripple"; in painting, Manuel Ataíde; and in literature that group of poets, styled as the "Minas School," are the outcome of this flourishing episode. Vila Rica, one of the mining towns, was also the stage of the first nationalistic movement in Brazil. It centred around these dreamers of freedom, while inspiration came from the American Revolution. It is known under the name *Inconfidência*, and Tiradentes was its martyr who paid with his life for the vain

it counts almost one and a half million. Not only foreign immigration, mostly Italian, explains this increase. Brazilians from everywhere flocked to the heart of the great coffee country, since its cultivation moved south from the State of Rio de Janeiro to the fertile purple earth where it found its *habitat*, about the end of the last century.

Santos, a somewhat prosaic port from where one half of the world's coffee is shipped, has a definite and important claim in the romantic history of Brazil. For here was born the beautiful and ambitious Domitília, the Brazilian Pompadour, who eventually received from her adoring Emperor the title of Marquesa dos Santos. Dom Pedro, that passionate Bragança, fell madly in love with Domitília on a visit to São Paulo, when he was but twenty-three years of age. Their love was like a flame, burning through all the proprieties and heavy traditions of the dull Portuguese society of those times. Dom Pedro forced his first wife to receive his lady-love in Court, and with the death of the Empress, five years later, it looked as if he would wed Dona Domitília in spite of the protests of his courtiers and countrymen. However, this scheme never succeeded and she eventually retired to

politically, socially or physically. . . . It is, as Kipling said, a world in itself." This is what Tom Clarke writes in *Word of an Englishman*, his latest book.

During colonial days Portugal could not send many white settlers to Brazil. The indigenous tribes being refractory to permanent agriculture, the Portuguese soon introduced the African slave, who was to become the nucleus of our rural population, and the main source of manual labour in the coastal and mining towns. A steady flow of blacks poured into the country from the Congo and Angola. Statistics are lacking as to their numbers; estimates varying from two to three millions, in the course of three centuries of traffic. Only after its termination in 1850 did the Brazilian Government embark upon a policy of planned European immigration. About four million Europeans have settled since the country gained its independence, a total to which must be added the already existing one million whites in a population of four millions, which Brazil had in 1822. The natives were a less important factor. The present 43 million Brazilians descend from these three sources. Sixty per cent. of today's population is white, 5 per cent. is still negro, while the remaining 35 per cent. is of mixed blood, in various



The abundance of succulent and exotic natural forms inspire this kind of exuberant still-life. The connection is obvious with the sort of scenes shown on the opposite page, which to European eyes smack of only one thing—the Film Studio. To a European it seems unnatural for Nature, unaided by man, to go so Hollywood. The truth is, of course, Hollywood is but an echo of the real thing which is to be found at its most impressive in Brazil.

have created an individual type—the "caboclo"—which is by no means degenerate. The deficiencies that are to be found in the population of Brazil come in reality from lack of education and sanitation, plus malnutrition. The vastness of the territory has made these problems gigantic. They are being tackled to the best of the Government's ability, but progress is bound to be slow.

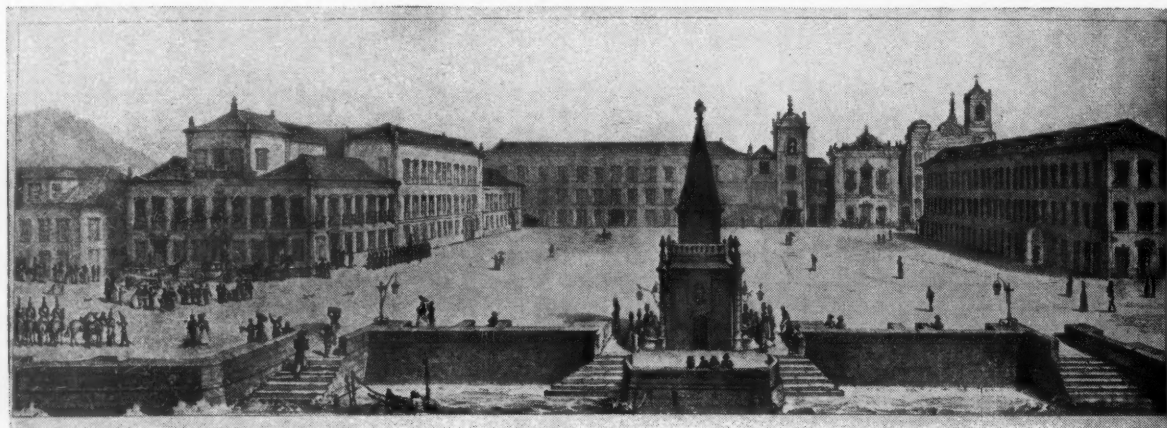
In this negation of colour and racial distinctions Brazil is ahead of North America and even of the other Spanish American countries.

The mixed race of Brazil has produced some outstanding figures in the world of art and literature. Perhaps the greatest American artist of colonial days was the "Cripple." Another mulatto artist was Master Valentim, the gifted craftsman and sculptor of Rio. Mulattoes were our three greatest poets and our one novelist of world-standing, Machado de Assis. In science and politics mulattoes have attained places of distinction.

This sense of toleration has been recognized by all students of Brazil as one of her chief national achievements. The Brazilians are a gentle people, a virtue inherited from the Portuguese, the most Christian of all people, and a virtue which the docile negroes have tended to accentuate. This characteristic reveals itself in a striking love of peace. The heroes of Brazil are not victorious generals alone. Her Continental aims are not imperialistic. Her political changes have been without bloodshed. Some day, who knows, she may endow mankind with an original civilization based on racial equality and international goodwill.



A carved angel from the facade of the Church of São Miguel by the architect, João Batista Primoli, about 1760.



In the early nineteenth century the French painter, J. B. Debret, produced his Picturesque and Historic Voyage to Brazil. Above is his view of the Palace Square at Rio.

attempt to free his country (1790) from the burden of taxation and the greed of the Crown. By then the alluvial gold of Brazil was nearly exhausted, and the gold towns became deserted and soon decayed. Of late, however, Minas has attracted the attention of art students both in Brazil and abroad. The Government has fortunately taken steps to stop all demolitions and disfiguring restorations. Vila Rica, renamed Ouro Preto in 1823, was recently declared a National Monument, and two museums were founded in historical buildings.

The other air-line from Rio goes to São Paulo. Here the tourist will be introduced to a completely different aspect of Brazil. The city was founded by the Jesuits in the sixteenth century. One of them was the Blessed Anchieta, the apostle of Brazil, whose pious accomplishments rank with those of St. Francis Xavier and the greatest missionaries of all times.

São Paulo is the fastest growing city on the American Continent to-day, the headquarters of the greatest coffee producing area, spreading out over millions of acres, as well as the most important industrial area of South America. The growth of São Paulo is a startling phenomenon. About the nineties, that city had a population of some 60,000. In 1900 it numbered 200,000. Then it began to gather momentum. It increased to 350,000 in 1910, to 600,000 in 1920, and to just under the million mark in 1930. To-day

São Paulo.

The last stage of the air-voyage brings one to Porto Alegre, the modern and attractive capital of the State of Rio Grande do Sul.

From the long struggle against the Spaniards, in the vast plains of the extreme south of Brazil, was born the picturesque "Gaúcho," a type evolved in the "Pampas" of the River Plate, to which region Rio Grande is closely related. The plains are the realm of the "Gaúchos." The enormous distances and their loneliness, the peculiar activity of life there—the raising of cattle—help to maintain for them the title of centaurs of the Pampas. Their great tradition goes back to the guerilla warfare of the separatist wars. The "Gaúcho" is inseparable from his horse. His life in the saddle brings out in him that mixture of freedom and grit, characteristic of the cowboy. His is the spirit that formed Rio Grande, the last province to be incorporated into Brazil. He has also been the last to bring in his contribution to the political life of the country. For the first time, in 1930, a man from the south rose to power, a typical representative of that breed of men, Getúlio Vargas, who inaugurated Brazil's new era.

So much for the history and physical aspect of the country; I will complete this sketch by bringing in the human element, the racial and social background.

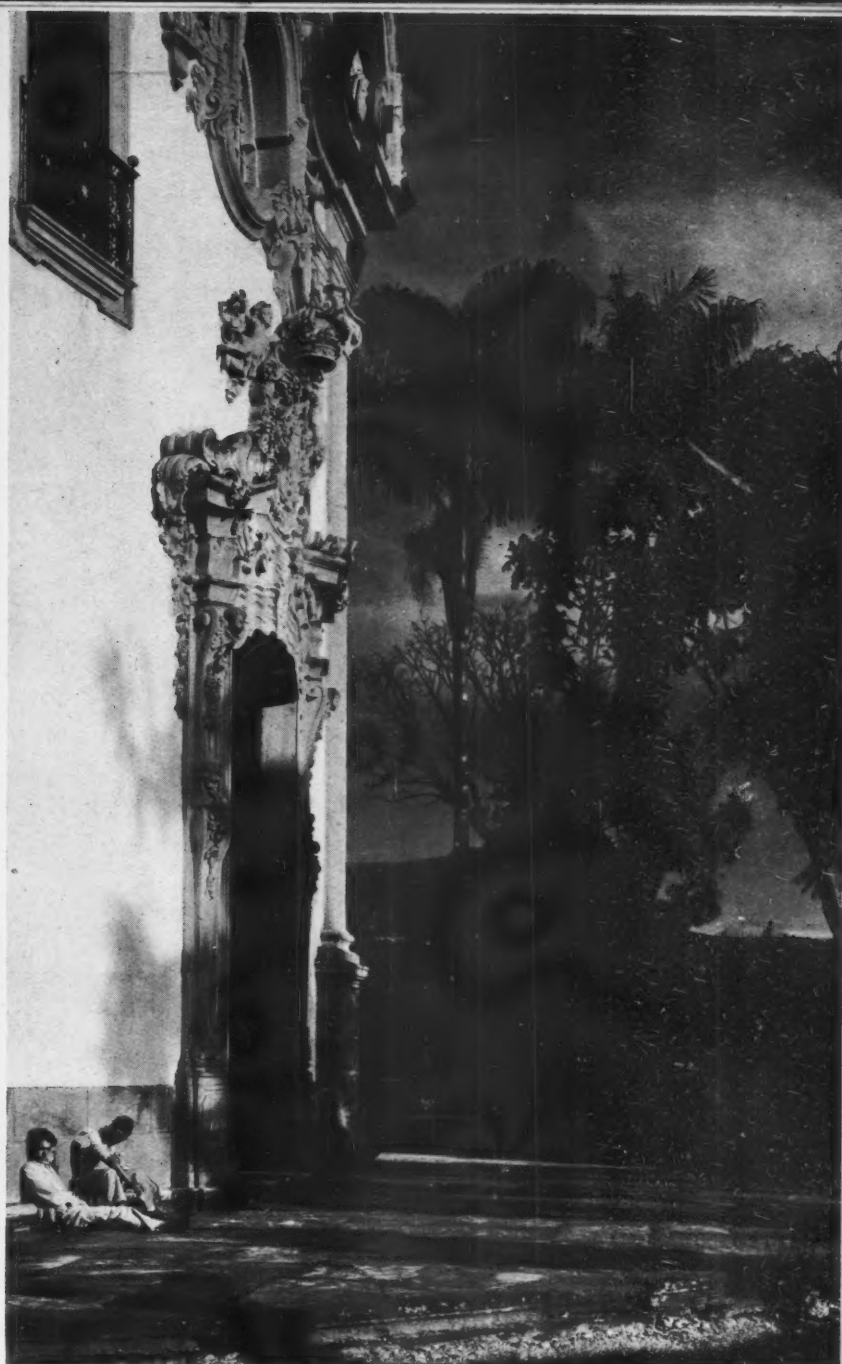
"Brazil is like no other country,

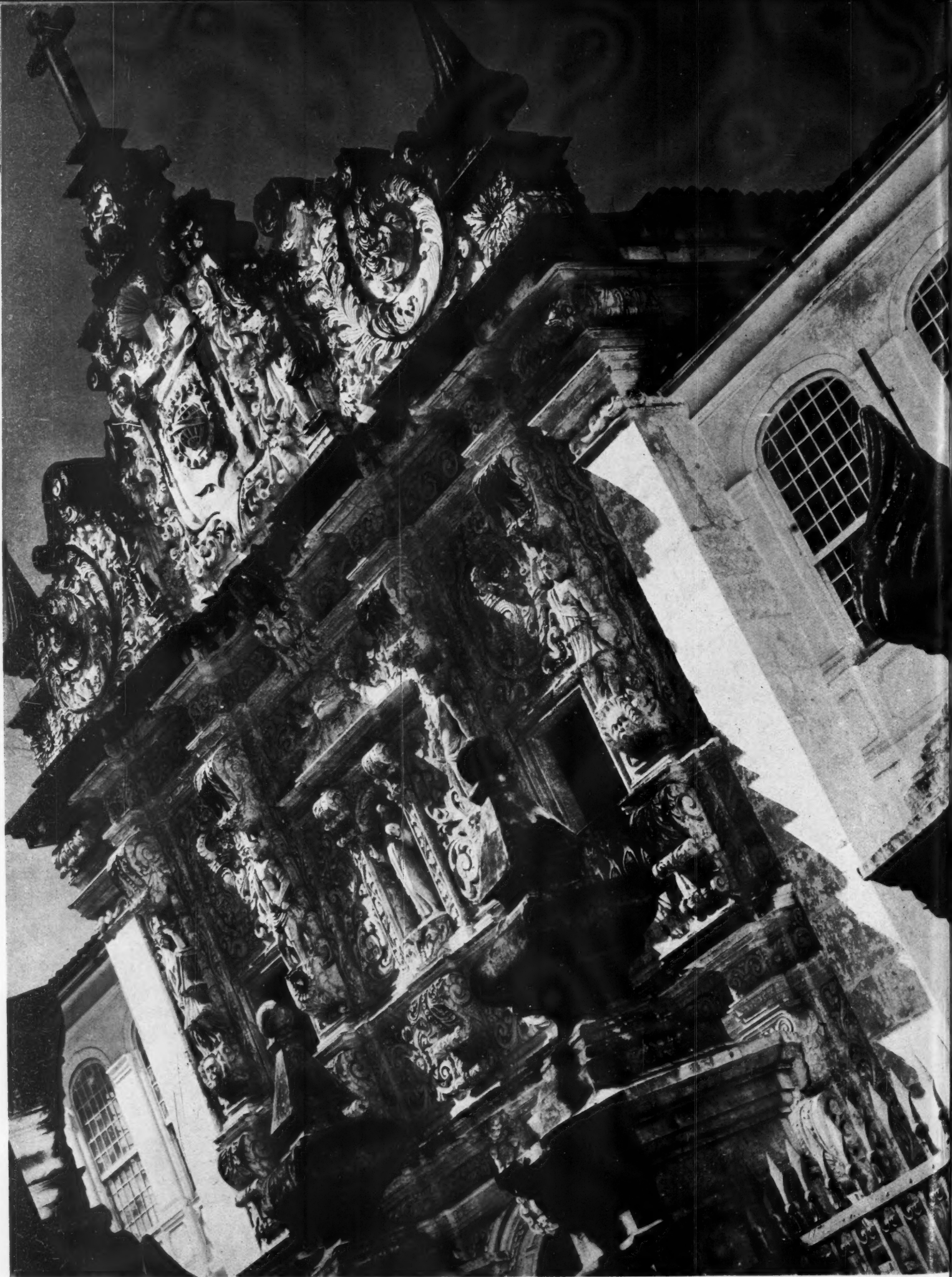
combinations and proportions, gradually tending to white. Some authorities are even of the opinion that the coloured element will have been absorbed within a hundred years.

Here I must touch upon a topic foremost among those of mankind's future—that of the differences of race, class, colour and religion, which affects Brazil more than any other country. Had the country adopted the European concept of nationality and race, what would have been Brazil's fate? It would perhaps be the most disintegrated country on earth. Without the Indians and the Africans, how could the vast areas of equatorial Brazil have been populated, where Nordic man has so far failed?

One might expect, from these many ingredients of the Brazilian population, that they should be antagonistic to each other; the Negroes, the Germans, the Poles, the Italians and lately the Japanese. But this is not so. Brazil as a melting-pot seems miraculously effective. She may yet show to the world the futility of the racial problem. All the people of Brazil form indeed one big happy family. For centuries, and by force of circumstances, Brazil has been built upon the principle of free miscegenation. What in other countries is only theoretically admitted—civil equality in public as well as in private life—becomes here a reality. No colour-bar, no segregation, no arrogant discrimination are known. The conception of the sin against the blood does not exist. Climate and living conditions







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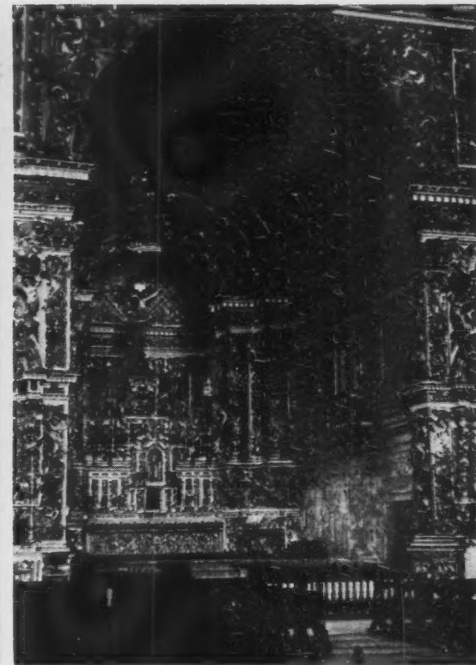
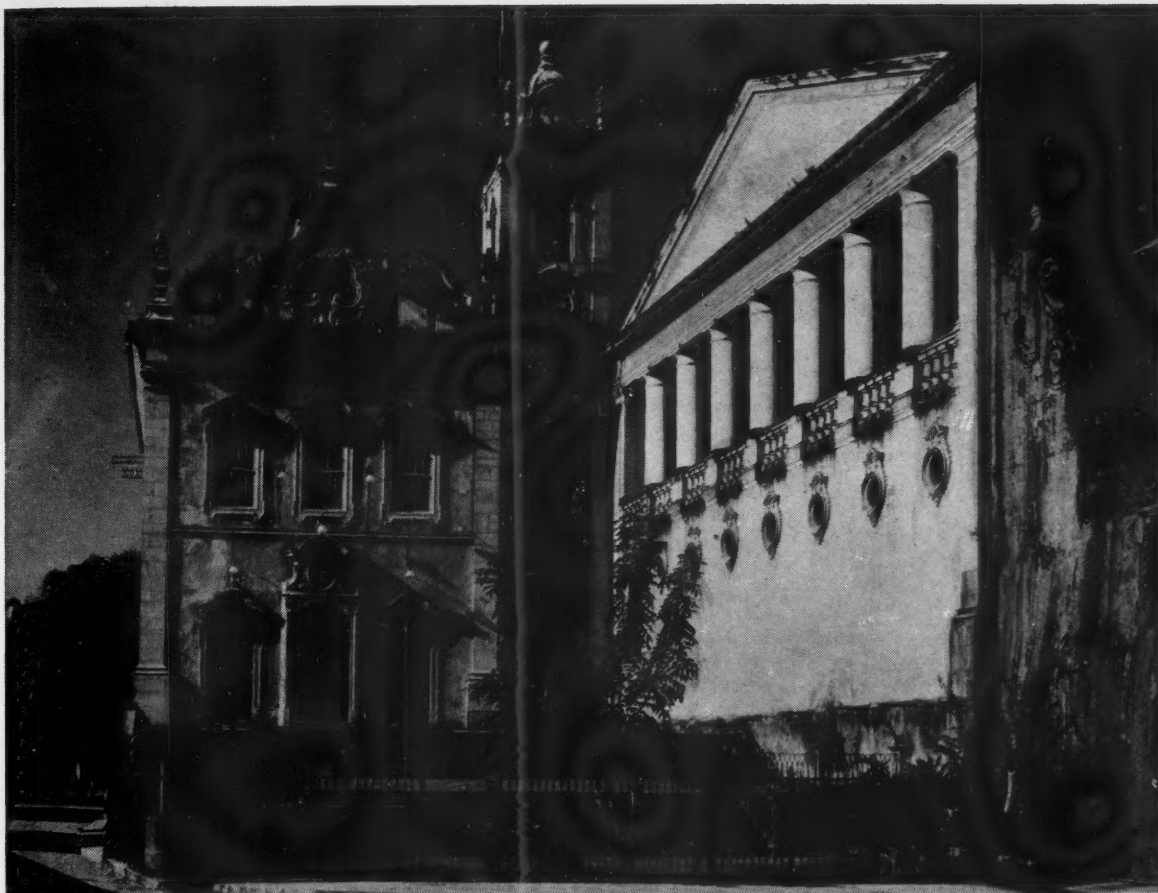
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The elaborately carved facade of the church of the Third Order of São Francisco at Salvador on the opposite page is an unique example of the Churrigueresque style borrowed from Mexico. Brazilian Baroque has emerged, quieter in style than that of Spain. It is to Bahia (Salvador), with her two hundred churches, that we turn for some of the finest examples of Baroque. The Parish Church of Pilar at Salvador, top, left, is noted for its lovely exterior, perfect proportions and exquisite arabesques. A ruined

Columbarium overlooks the church. The interior of São Francisco de Assis, above, is a golden fantasia. Gold runs and ripples over everything until the whole structure seems to be dissolved in gold. The art of gilding is directly descended from the Portuguese. Below, the monastery of São Francisco de Assis with its double storied arcaded cloister decorated by white and blue Portuguese tiles.

## THE BRAZILIAN STYLE

By Sacheverell Sitwell

THE present inclination of all Englishmen is to look beyond Europe for the future. We know, now, what the Dominions mean to us. And the rest of the world? It lies with the United States, Russia, and Latin America. But Latin America has a particular appeal of sentiment. For it represents what we intend by Europe upon another soil and in another clime.

But we know very little, most of us, about this continent and its pair of mysteries, Brazil and Mexico. I call them "mysteries" because they are so rich a subject for speculation that we could think of them for ever and never come to an end of their possibilities, past and future. Yet Mexico is neighbour, geographically, to the United States. The wonders of its Aztec, Mayan, Colonial architecture are becoming known. We know that Mexico is among the lands of living art. Most of us have heard of Diego de Rivera and have seen the reproductions of his frescoes. What we are discovering now and should have known before, for Brazil is three times bigger than Mexico in population, is that Brazil has an old architecture worthy of its history and a modern architecture, not yet ten years old, the best architecture, there can be no question, in the modern world.

The link between new and old in Brazil, as everywhere else, lies in the climate and the landscape, and this mutual harmony is governed by a rule, that so long as what is new is good it will go together, perfectly, with the old. Not that, in Brazil, old and modern buildings stand side by side, but both have been built in harmony with the setting, and so form an entity. This is the *genius loci*, the spirit or contribution of the Brazilian nation. The modern is just as much Brazilian as the old. Both together, and separate, are something fresh and undiscovered to most Englishmen. We want to be able to look at a building and know that it is Brazilian. In the beginning, as is natural, we expect to be reminded of Portugal, with a difference. For the Colonial houses at the Cape are not Dutch, entirely. The

Colonial buildings in Mexico are not precisely Spanish. The Baroque in Mexico does not, in actual fact, bear much resemblance to the Baroque in Spain. It is Baroque under an Indian influence, effected by the soil and clime. And so it is in the case of Brazil. We see the effect of Portugal, but under the Brazilian sky. And Portugal has always been more restrained and cold than Spain. We shall find no evidence in Brazil of the "excesses" of the Spanish spirit, no trace of the heresiarchs or extreme followers of the Baroque from Spain. The buildings are quieter and more considered, proving the hand of Portugal and not of Spain.

Rio de Janeiro has a few old churches of the seventeenth and eighteenth centuries, but these old buildings are in no sense the background of the capital. In their interiors we shall find what we expect—gilt carvings, rich sacristies, and painted tiles or *azulejos*. These sculptures and decorations are associated with the name of Master Valentim, a craftsman who was born in Brazil and trained in Portugal. But the beauties of Rio are its sea and mountains and its modern buildings. As a capital, it has all the nervous energy and excitement of a city of two million inhabitants, predominantly Latin, in a setting more tropical, and more beautiful, than Naples. It is the city of Carnival, as that was understood at Venice in the eighteenth century, with a more Southern exuberance and fantasy. The near-by Petropolis has Empire villas, for we should call them "Empire," built under French influence in the time of the second Dom Pedro, when Brazil had Emperors, but we should find the tropical trees more interesting than the colour-washed walls and classical interiors. Nothing old in Rio de Janeiro can compete for our interest with the beauties of Nature, which are eternal, and with what is new and of our time. Rio is a city of the present and the future. What is past, comparatively, is dead and faded.

For the old we must see Bahia, the capital of Brazil till 1763. It is São Salvador da Bahia, on the bay of All Saints, well and truly, for it has two



hundred churches—and a great negro population to give it colour. There are an upper and a lower town, and the negro fishing quarter by the harbour. The fish wives of Bahia even typify the national costume of Brazil with their gay colours and their turbaned headdresses. When we applaud Carmen Miranda, one of the only artists of the films, it is of Bahia that she reminds us. For the songs and dances of that fishing quarter, transmuted, are of a like importance in Brazil to the Andalusian Gypsy influence in Spain. Here are the caves of song, and the bright dresses.

In the upper town are the Baroque churches. Bahia has, in fact, three splendid Baroque buildings. The parish church of Pilar has the sort of exterior that we associate with Southern Italy or Sicily, and at that a fine example flanked by the curious pillared building which in those other countries could have been built, about 1820, by a local architect in Greek temple style, under the influence of the local excavations. The church of the Third Order of São Francisco is more interesting to us because it is not Italian, nor yet, exactly, Portuguese. The elaboration of its carved front is more like a Mexican building. It recalls the Churrigueresque churches built in Mexico which, so confusingly, have little resemblance to the authentic buildings of this much

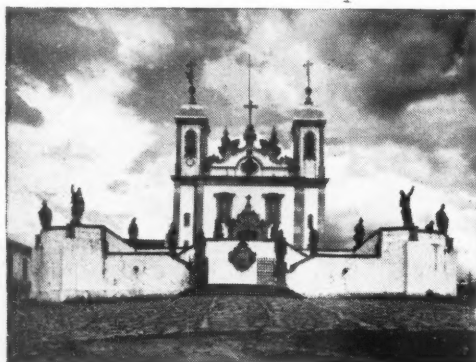




An elegant trinity of Churches at Ouro Preto, all three adorned by sculptures from the master hand of Aleijadinho, the mulatto cripple. São Francisco de Assis, above, has rounded towers, a carved doorway and a medallion. Below is Nosso Senhor de Bom Jesus de Matosinhos, notable for its twelve magnificent soapstone figures of the Apostles and a finely terraced garden. São João del Rey, right, is slightly more ornate with minaret-like towers. On the facing page is a water-colour by Lieutenant Chamberlain, R.A., of Ouro Preto, painted about 1819, now in the possession of Sr. J. de Sousa-Leão.

abused architect in Spain. I cannot remember any church in Portugal that suggests this church of the Third Order in Bahia.

But the third Baroque building, the church and monastery of São Francisco de Assis, is quite definitely Portuguese from the plain exterior to the exuberance that hides within. The cloister is two-storeyed, with *azulejos* on both floors all round its walls. They are the typical blue and white tiles of Portugal, and the scenes as so often there, are drawn at will from the Bible or from mythology. These *azulejos* must be the work of craftsmen in the first generation from the mother country. This tiled cloister could be in Coimbra, in Oporto, in a dozen places, and is a charming example of an art which is peculiar to Portugal. But the astonishing golden interior of this church is so entirely Portuguese that we must be allowed to deflect our narrative, for a moment, to the Baroque of Portugal. So much was destroyed by the Lisbon earthquake of 1755 that we have to look elsewhere than the capital for examples, and begin at Oporto where the church of São Francisco, down by the harbour, and the convent of Santa Clara, on the steep hill above, prove to us what fantasy and imagination can achieve by gilding. There are, however, smaller instances that are more extraordinary still. The interior of the convent of Jesus at Aveiro, of the convent of the Conceição at Beja, where the "Portuguese Nun" passed her life and wrote her Letters, the interior of a little church at Faro, these and a few more, are uniquely Portuguese in their carving and their gilding, in the manner particularly in which the back of the high altar is built up and recessed in tiers like little, diminishing coffers, or the eaves of a pagoda. This form or fantasy of decoration is found nowhere else than in Portugal, and has yet to be admired. Baudelaire, dying, and driven from Paris by his debts, had to take refuge in Belgium, where he could find nothing in that whole country to solace him but the Baroque



churches of Malines, and he mentions in his letters the church of St Loup and its gilded carvings. We feel certain that Baudelaire would have loved the golden altars of Aveiro, Faro and Beja. Their gilding is of a quality never found in the Baroque churches of Italy or Spain. The reason for this is that it was the gold of Brazil; and the high altar of the church of São Francisco at Bahia, flashing, glittering, "rutilante de dorures," is another instance.

How lovely has been the Iberian influence on the architecture of the Americas, when we think of its wonders! Of the churches of Puebla, of the Mexican high altars; of Antigua, Lima, Quito, Potosi, and now Bahia! The Iberians, architecturally, have been the greatest colonists. The Portuguese only less than the Spaniards; their relics being Goa in India, and Bahia in Brazil. But there are fine churches, as well, in other places in Brazil. Churches and convents at Recife (Pernambuco), and at Olinda, and the Jesuit Misiones in the South. If we think of the fine sites, architecturally, in Spanish America we shall find so many of them are churches built near the gold or silver mines. This is true of Mexico, Bolivia, Peru. It is true of Tlaxcala, Guanajuato, Taxco, Potosi. And we shall find that it is true, equally, of Minas Geraes, where lay the gold mines of Brazil.

The gold of Brazil was discovered later than the gold of Mexico or Peru. The first consignment of gold to reach Portugal from Brazil only arrived in 1699, and later still came the Brazilian diamonds. It was in consequence of this wealth that the court of the Braganças became one of the most extravagant in Europe, and we can read of its fantastic appearance in Beckford's Letters, and still see the Royal carriages at Belem. Much of the Brazilian gold was spent on music and of course nothing is left of the singers, of Caffarelli or Egiziello. Nothing is left, and no one again will ever sing their songs. But if, on the analogy of Mexico and Peru, we look for architecture among the gold mines we shall find it.

The old mining towns of Minas Geraes are two hundred miles inland from the Atlantic, and more than that distance north from Rio. The chief of them is Ouro Preto (Black Gold), and whether the name of it refers to some special quality in the precious metal or to the method by which it was mined, we do not know, but in fact it was all worked by negro labour. Not Indian, like the gold and silver mines of Mexico and Peru; but African. The whole town of Ouro Preto has lately (1933), and wisely, been declared a national monument; nothing may be pulled down or built without permission. It has been calculated that Ouro Preto had in the middle of the eighteenth century a population of two hundred thousand, most of them being negro slaves. At this point we may well ask why it is that neither the gold of

California or Klondyke, the gold reefs of Australia, or the gold and diamonds of the Rand, have given birth to architecture? Is it only the Iberians, and never the Anglo-Saxons, who build as well as mine. Had they been Gothic buildings we might have learned this moral long ago, but the mining towns of Spanish America and Brazil are Baroque and Rococo. They have only come, late, to our appreciation; though what could be more appropriate to a gold mine than the interior of a church all glittering with gold?

The general aspect of Ouro Preto is shown in the accompanying colour plate after the water-colour by Chamberlain, an English artist who visited the town about a hundred and thirty years ago, and wrote a book of his travels in Brazil with illustrations in aquatint. In this drawing we get the colour of its white walls and red tiled roofs. It is a town of churches upon little hills, with winding streets, like that which leads up to Santa Ifigenia, a church built for the negroes. A characteristic of Ouro Preto are the Baroque fountains at least one of which, the Chafariz dos Contos, consisting of a stone shell from which the water drips, set in a bold stone scroll upon the plaster wall, is worthy of the lesser Roman fountains of Bernini, though somehow it is typical of Portugal and could be neither Spanish nor Italian.

But the attraction of Ouro Preto are the sculptures of Antonio Francisco Lisboa, known as O Aleijadinho, "the little cripple," the son of a Portuguese father and a mulatto mother. His late date (1730-1814) compares with that of Master Valentim, in Rio, and shows how recent was this last stirring of the Baroque spirit. O Aleijadinho was a leper, and the frightful ravages of the disease which may have been leprosy in combination with other maladies as well, so mutilated him that in his last years he had to be carried to his work under a wide sombrero and a flowing cape, so that none could see his features. He had lost his hands and fingers,



and the chisel and mallet had to be strapped on to his stumps. He worked all day, and was carried home after nightfall. His sculptures in wood and stone are to be found in other towns of the State of Minas Geraes, in Congonhas, Mariana, São João del Rey, but, chiefly, in Ouro Preto; and the soft soapstone of the district which hardens considerably after it has been quarried was his favourite material, comparing in this respect with the soft, golden stone of Lecce in Southern Italy and Noto in Sicily, which enabled similar effects to be obtained. In Minas Geraes the building stone is orange coloured, richer than the pale gold of Lecce or the golden stone of Noto, while the sculptures of O Aleijadinho are in the greyer-greener soapstone.

The façades of two churches at Ouro Preto, São Francisco and São João del Rey, are the work of O Aleijadinho. Both are of rather similar design, with round towers to either side and a flat front of stucco between stone pilasters, but the doorways and the carved decorations are from the hand of O Aleijadinho. In São Francisco the doorway is of wonderful elegance, like an elaborate mirror frame, and there is a great sculptured medallion above the door. In the other church the doorway is, if anything, still more elegant, and the sculptor's hand





is at work again upon the cresting of the roof, above the cornice. In the interior of São Francisco the font is by O Aleijadinho, and probably the most beautiful and elegant of all his works, a font like a wall fountain, consisting of a basin with a great sculptured frame behind it and a statue of St Francis, with figures of cherubs at his feet, while a winged angel flies above his head, and more cherubs ride upon the cornice. Another font by O Aleijadinho with a half figure of the Madonna and Child is in the church of the Carmelites at Ouro Preto.

Another, and indeed the last work by this crippled genius, is at Congonhas do Campo, a mining town not far away. It is the pilgrimage church of Bom Jesus do Matosinhos; the doorway is by his hand and so are the Twelve Apostles in rhetorical attitudes upon the terrace. Below, upon the terraced hill, lie six chapels with conical roofs, for this pilgrimage

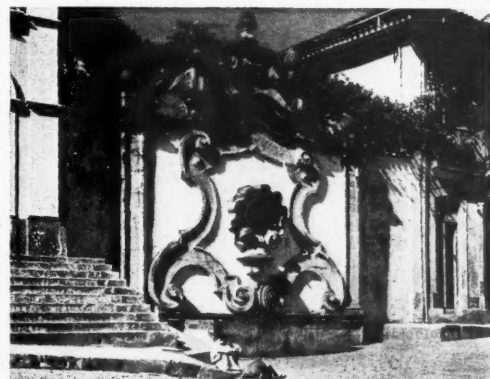
church is modelled upon the Bom Jesus and its chapels and terraces near Braga in Portugal, and upon the similar church at Lamego. But Congonhas do Campo does not show O Aleijadinho at his best. He was too crippled by disease. The Twelve Prophets upon the top terrace are rigid in attitude and the actual walling of the terraces is crabbed and ugly. In the interior decoration of the Ouro Preto churches he had the help of the painter Manoel da Costa Athayde, who does not compare unfavourably with the Bavarian and Austrian Baroque painters, which is to say, his painted scrolls and columns are more interesting than his figures. Athayde is a master of painted ornament, but not quite a painter.

To sum up, Ouro Preto is beautiful for its fantasy and elegance in little things. It has no one church, in particular, like the splendid church of Taxco, or like the Santuario de Ocotlan, or the church of Tepozotlan. All these are in Mexico, and are already famous. It is not built upon Inca foundations, like the churches of Cuzco and Quito. It has not the unrestrained fantasy of the Mexican churches, nor the solid Spanish magnificence of the churches in Ecuador and Peru. But it is the Rococo of João V, come from Portugal, and flowering unexpectedly in this remote and romantic setting, hundreds of miles into the interior of auriferous Brazil, and to be admired in the knowledge that it was a negro slave population who worked its mines and thronged its winding streets.

But we must bid farewell to these Baroque churches and linger with our readers for a few moments in what could be called Brazil's negro plantation days, of which the memorial is in the splendid book of coloured plates by the Frenchman Debret, a pupil of David, who was invited to Rio de Janeiro in order to preside over the academy of painting by Dom Pedro I, Brazil's first Emperor. In its pages we

see the negroes carrying palanquins, and would recall that there are persons still living who remember being carried in sedan chairs up the steep streets of Bahia. The street scenes in Debret are full of negro colour, and we even get the impression of a particular black slave physiognomy as though, and this is not improbable, the slaves came from a special part of the Gold Coast. Many, perhaps the majority, were brought in English ships. They are not the blue-blacks of Senegal, but came, let us suppose, from Gambia, a Cape Coast Colony. There are plates, too, of court scenes with the ladies of Rio wearing Empire dresses. A later book by Rugendas, a German painter, is not so interesting as Debret, of whom we must say, too, that he had full understanding of the tropical flowers and trees, and made good use of the opportunity. His book is in fact a historical document of the first importance for the visual appearance of Brazil under its first Emperor and, as well as this, it is among the most beautiful illustrated books of the early nineteenth century.

The Empire style, under the French architects of Dom Pedro I, was succeeded by a plethora of fantastic buildings, all through the nineteenth century and, indeed, till recent times. And the sculptures were in keeping. Probably the opera house at Manáos, on the Amazon, eight hundred miles above its mouth, is the most typical Brazilian building of the nineteenth century. This was built during the rubber boom. But there is more pleasant criticism to be passed upon the Brazilian furniture, often of dark jacaranda wood, modelled on the jacaranda beds and chairs and tables of the previous century, and with mounts of silver. The sacristies of Rio and Bahia have splendid jacaranda presses for the vestments. It is a Brazilian wood but the forms and shapes are Portuguese. And there are the works of the



One of the sixteen fine Baroque fountains preserved in Ouro Preto by João Domingos Veiga, the Chafariz dos Contos.



Brazilian silversmiths, under the influence of Lisbon.

Early in the twentieth century it might have been thought that Brazil was destined for a future of great prosperity, but that the arts would go on for ever under the worst influences from Europe. There was no enormity of nineteenth century France, Italy or Belgium that was not perpetuated in Brazil. The vitality and exuberance of a new and expanding population has inflated the very draperies of the modern statues. Brazil, we might consider, will be the last land of all to discover a sanity in modern architecture. Indeed, at any time from the beginning of this present century, the arrival of the new architecture into the Latin tropics must give birth to the most appalling horrors. How could it be otherwise, with a past consisting only of Rococo, and surrounded by all the worst excesses of the present? The history of why this has not happened is so recent that it is difficult to unravel it. So far as it is due to any persons in particular, it seems to be from the taste and criticism of Lucio Costa, and under the lead of Gustavo Capanema, who is Minister of Health and Education. It has all taken place since the Vargas government came to power in 1930. But the visit to Brazil of Le Corbusier, in 1936, marks the true beginning of the movement.

Le Corbusier used to be the most rigid and uncompromising of the modern architects in Europe. He has taken many years to become the master of

cement adaptation of the convent grille as seen in Sicily or Spain, or of the wooden *moucharabieh* of Moslem lands. The other is the *brise-soleil*, but we prefer *quebra-sol* in Portuguese, a prettier word and hotter, more tropical in sound. The *quebra-sol* is a movable sun-blind put outside the building, and used skilfully it can add much to the beauty of a modern building, for some few of these buildings are beautiful in the accepted sense, with no limitation.

Some of the architects are Brazilian and some are foreign. Alvaro Vital Brazil, an easy name, has at least one extraordinarily beautiful building to his credit, the Raul Vidal Elementary School, and it was completed in 1942, p. 79. The problem here was not to spoil the view of Rio across the Bay, and to make a sheltered playground for the children. This has been accomplished by raising the school on a line of columns through which the mountains and blue sea are seen, and making the shade under the building into the playground. The same architect built the laboratory at São Paulo for the making of snake-bite serum, also completed in 1942, and the curiously romantic purposes of this building must remind us we are in Brazil, and that behind us lie the forests of the Amazon. But so far we have not met with the *quebra-sol*. Alvaro Vital Brazil is content with small, square windows in a white façade.

The Ministry of Health and Education in Rio offers the most startling use of the new invention. This



One of the terrace statues by the Cripple at the Church of Bom Jesus de Matosinhos, of great strength and beauty.



Brazilian life about 100 years ago, as depicted by Debret, gives the atmosphere of that time. Colourful negroes carried on their shoulders the whole fabric of the life of the Portuguese. Slaves though they were, they wore bright dresses, bangles, they sang and danced, they were lazy and care-free. The lady with her black boy in attendance seems amused at the fat negress squatting on the veranda but the overseer behind is angry with a slave whom he is beating with a whip. The next scene shows hunters forging their way across a torrent and exploring the marvels of the primeval forest. Left, below, is an interesting early example of mobile housing achieved by prefabrication. The herdsmen move this caravanserai from camp to camp. When all the prefabricated units are assembled they make a square compound wherein protection is assured. For transportation the sections are folded up and strapped to the backs of the pack animals.

his own conventions, while there is every reason to suppose that his buildings are not suited to a rainy climate. To Switzerland, perhaps, or Norway, but not to France or England. They need, in fact, strong sunlight; and in our latitudes this can only be given with the help of snow. A building designed by Le Corbusier for Barcelona and never carried out, marks the first use of the inventions that he took with him to Brazil. These were nothing less than a new architectural feature, which in the hands of his followers in Brazil has developed into the only solution for their climatic problems. For Le Corbusier has not practised in Brazil, he has been consultant architect. The problem in question is that of heat and light. The imported mid-nineteenth century architecture had made houses and offices alike, impossible to either work or live in. But there must be some means to turn the violent heat and light to advantage and profit by them, and this has been accomplished, as Mr. Kidder Smith describes in greater detail later, by two methods. The first is a pierced screen of concrete or *cambogé*, a sort of

building is not yet finished, and it is the result of collaboration among the modern architects. Lucio Costa has worked upon it; Le Corbusier has been consultant, and his pupil Oscar Niemeyer has contributed. Two sides of this building, which are in shade, are made of glass entirely. The other sides have those movable blue-painted sunshades which are worked by a crank and are turned with the movement of the sun, giving perpetually varying effects of light and shade within the building. The problem, we admit, is different. Yet it is sad, after this, to walk past and contemplate the building that houses our Ministry of Information! But even the water tower at Olinda (Pernambuco) has become, in skilled hands, a mysterious erection like some extremely sensitised hearing apparatus for receiving messages from another world—and under the water tower there is a dancing floor. It is a lesson, too, how well it looks beside a Baroque church. And it is worthy of remark that Catholic nuns are managing schools in some of the best modern buildings in the country.

Oscar Niemeyer, the pupil of Le Corbusier, has been given his opportunity at Belo Horizonte, a new settlement in Minas Geraes, three hundred and fifty miles north of Rio, upon an artificial lake. Later on, some of the Government departments may move here, for it is three thousand feet above the sea. Niemeyer's buildings comprise a Yacht Club,\* a Casino and a Restaurant or Night Club on an island. The Casino is of steel, cement and glass, while in the interior, use is made of onyx from the Argentine and light-coloured native woods. The restaurant is circular, with a small stage and lily pond in the interior of the circle. But the Yacht Club is the most interesting of the three buildings, with indoor and outdoor restaurant and swimming pool. A landscape gardener, Roberto Burle-Marx, has assisted in the layout and decoration of these buildings, and has made a mural painting for the Yacht Club. It is this same landscape gardener who is reputed to make special use of the croton with its variegated leaves, which is native to Brazil, but only known to us in the most steaming of Victorian stove houses. Burle-Marx uses all the different varieties of the crotons, and masses or regiments them in their colours.

The brothers Marcelo and Milton Roberto designed the Brazilian Press Association Building in Rio with its roof garden, and Côrrea Lima, the seaplane station upon the bay. Both these show modern architecture adapted to the new purposes. Of course, not all of Rio's modern buildings are to be admired. Some of the new apartment houses are frankly hideous. And there are wild fantasies, such as the office building in São Paulo, built on the design of the flag of the city of São Paulo, with a flag pole at one side of concentric windows, the main windows representing the stripes of the flag, and a round window at the top, the city's seal. Also Rio, São Paulo and the other towns are so fast growing that general planning has been impossible, and the better modern buildings stand in isolation, or are even spoilt by their surroundings.

An Austrian architect, Bernard Rudofsky, who is now living in the United States, came to São Paulo in 1938, and in the space of three years built a pair of private houses that in their way are among the greatest successes of the whole modern movement. One of them, the Frontini house, has a great thirty-five foot glass door that slides open on to the garden, while another feature is an open grille of concrete with roses growing through its openings. Rudofsky has made inspired use of the tropical flowers and foliage, and of their shadows on the walls. The forms of the trees have an effect of intoxicating richness against the cool control and serenity of the architecture.

The Arnstein house is bigger in scale and more remarkable still. It has been described as the most beautiful house in the entire American continent,\* and it was only completed in 1941. No fewer than five garden courts are enclosed in it, yet the total area is small. They are individual courts, the size of rooms, planted with flowering oleanders, with trailing vines and gorgeous orchids, with camellias

\* These buildings will be illustrated later.

[continued on page 77]

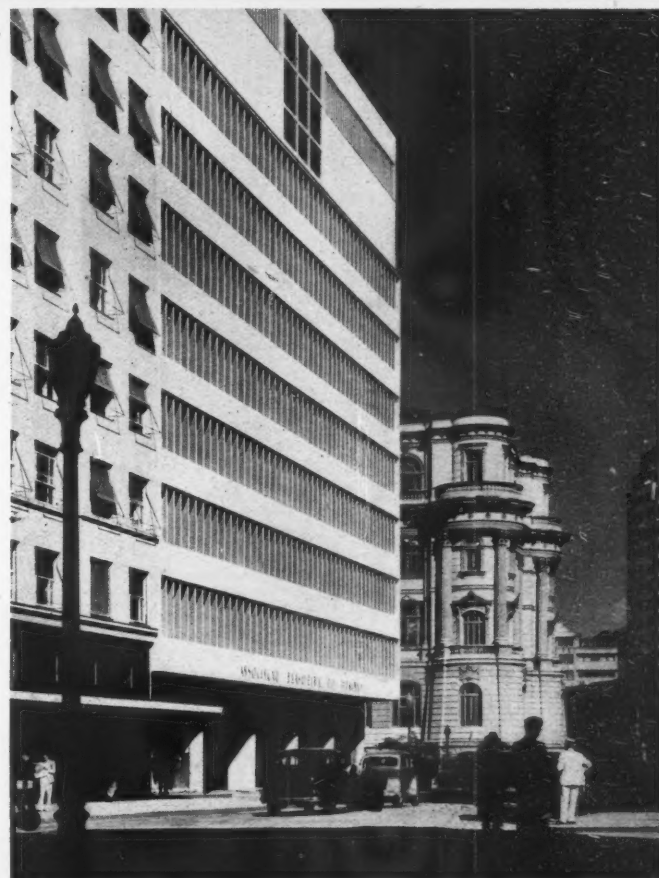




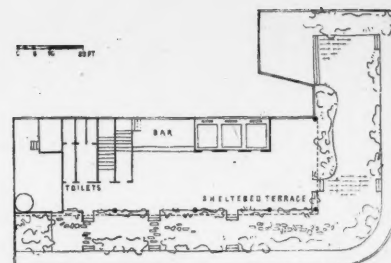
## Modern Buildings

Brazil is very much alive to her future possibilities, for the exploitation of her natural resources by modern industrial methods is only beginning. The temperate climate and absence of frost allows concrete to be exposed here in any weather and this material has been chosen almost exclusively for contemporary building. Iron has yet to be worked on a larger scale before steel can be employed in the building industry to any extent.

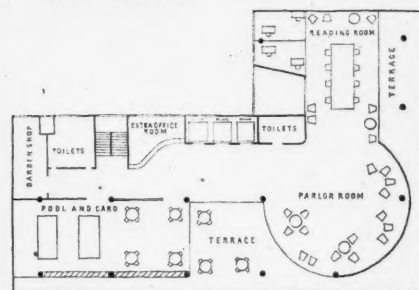
Le Corbusier's visit to Brazil as consultant marked a turning-point in the history of modern Brazilian architecture. His ideas were absorbed by a brilliant band of architects and by them developed. The modern movement blossomed suddenly. It by-passed the infant stage. The problem of heat and light, a question never tackled by the old school, has been successfully solved. Two main types of sun-baffle have been devised with variations illustrated later: the pierced concrete screen or "cambogé"; and the quebra-sol or brise-soleil, are both used in a revolutionary way. But the most striking thing about these new buildings is that they are already entirely Brazilian—as Brazilian as Swedish buildings are Swedish. So Brazilian are they, they do not seem to conflict with the earlier architecture. On the contrary, one type seems to enhance the other. Here are two good examples of the remarkable way "period" and modern complement each other. Right, the Press Association building; above, the water tower at Olinda photographed against a very different kind of building. This water tower incidentally might be called the first modern Folly, since its shape appears to have been designed for abstract effect rather than for use. It is mostly empty. Water-tower-Follies have, of course, a very respectable tradition, and it is satisfactory to find this persisting into the modern movement.



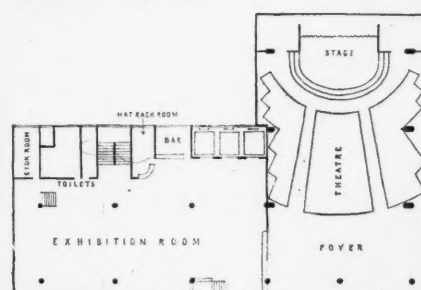




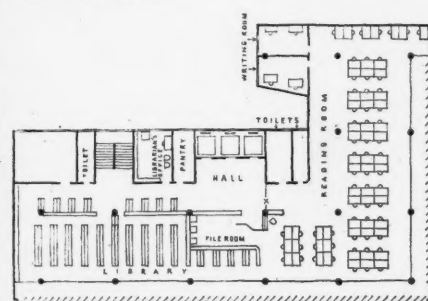
ROOF GARDEN



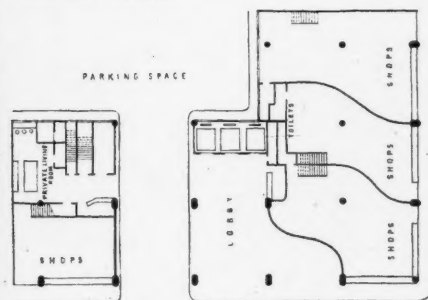
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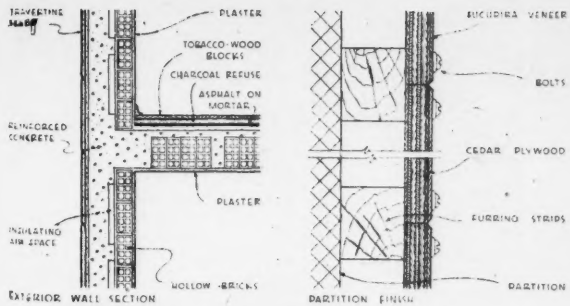
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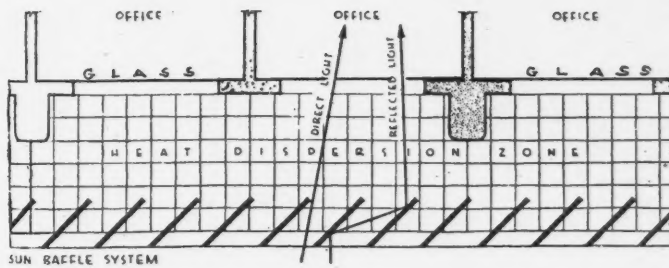
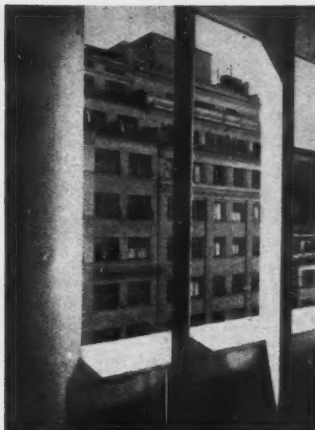
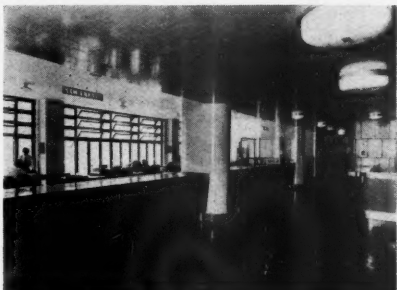
GROUND FLOOR

## Offices

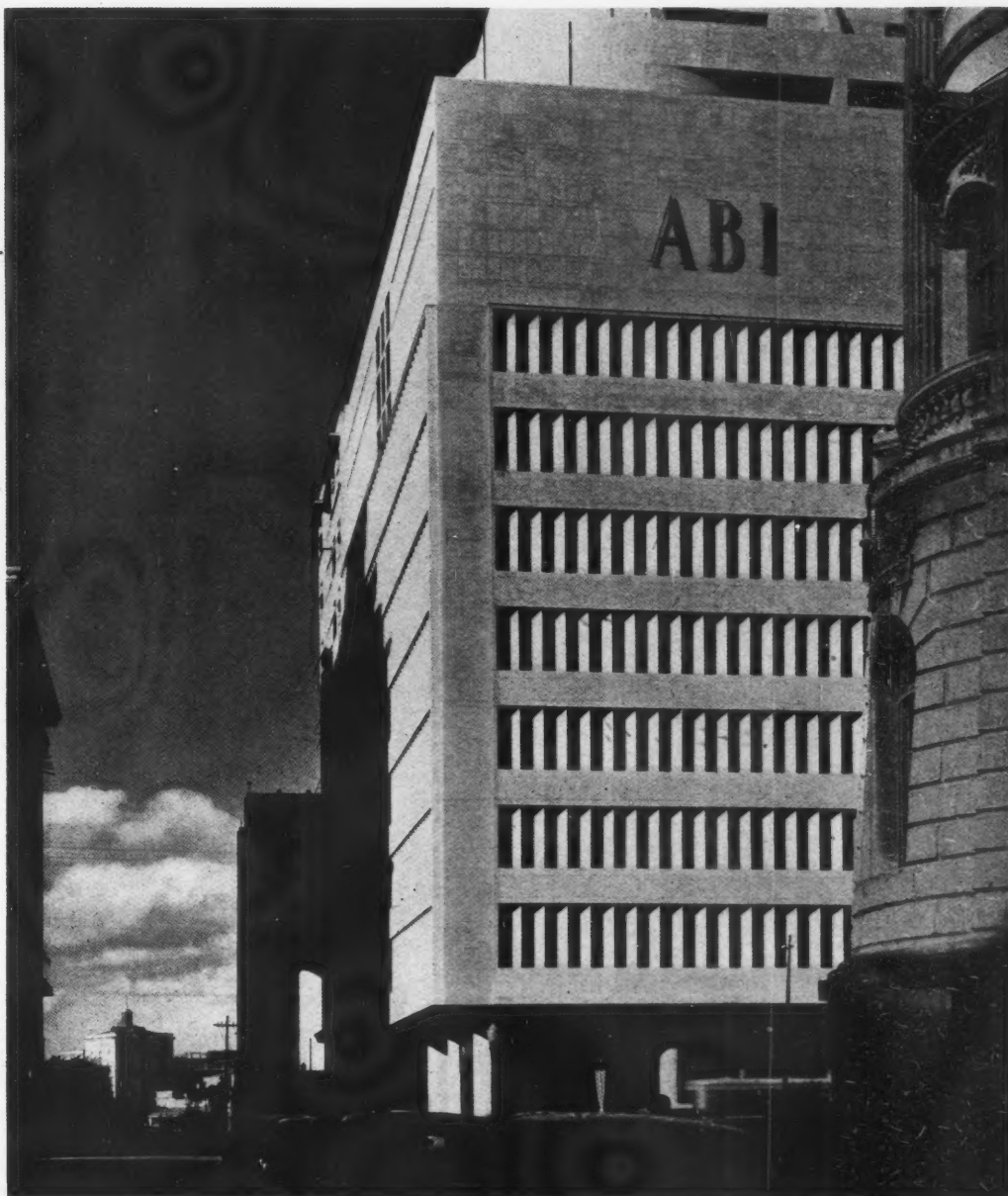
The Press Association building of Brazil. Architects, Marcelo and Milton Roberto. This building is a simple rectilinear block in one of the main streets of Rio. It is set, as are so many of the modern Rio buildings, on exposed columns. The unit is a solid and substantial unit and built on a similar formula to that of the Ministry of Education, yet of quite a different character. Here the brise-soleil is constructed of diagonally fixed concrete slabs, each 32 inches deep and 2½ inches thick. These are separated from the offices by a narrow continuous corridor. The two hot sides of the building are faced with these, some of the rooms facing the corridor have glass on the inner side, others are left open. At the top is a roof garden and restaurant profusely planted. The illustrations on the right are: the open treatment of stairs on a landing; a reception hall; the restaurant on the roof; and a view of the roof garden.



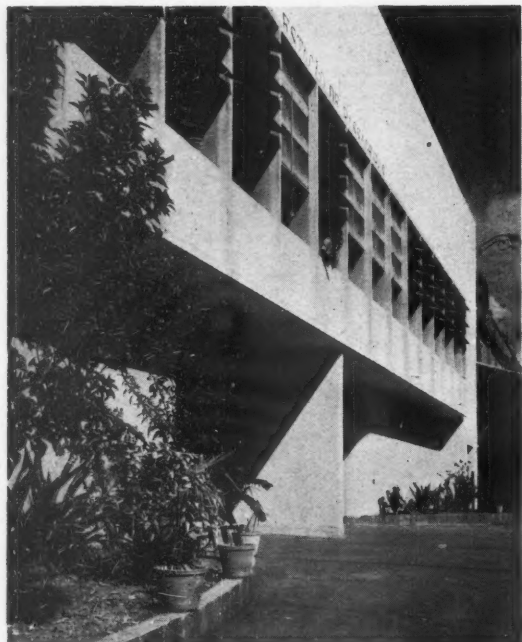
# DETAILS OF CONSTRUCTION



Top left, a closer view of one of the street elevations. Top, centre and right, views from the heat insulating corridors surrounding the offices, showing the fixed concrete louvers of the brise-soleil. Left, a diagram of the brise-soleil system. Below, the street entrance.



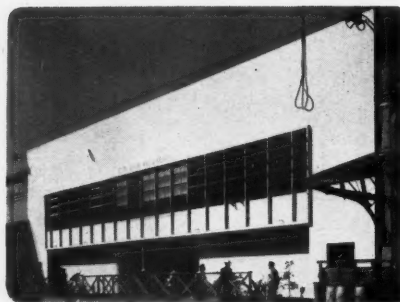




## Coastal Boat Station

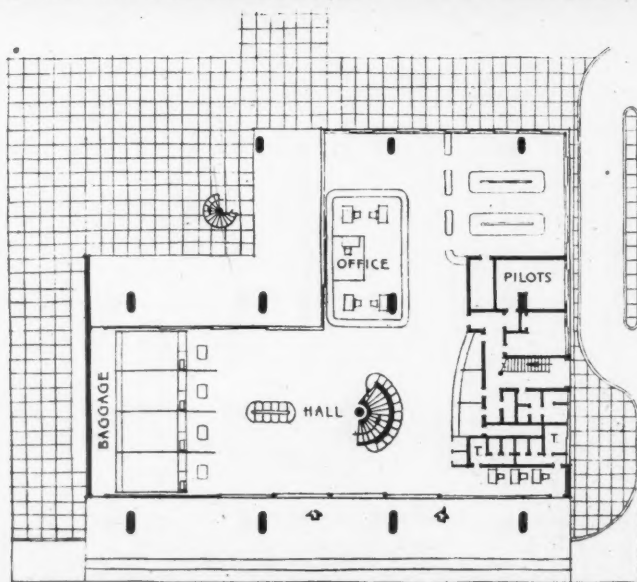
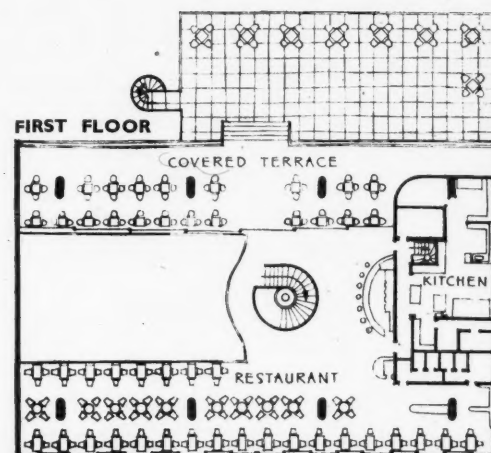
Coastal Boat Passenger Station, Rio de Janeiro. Architect, Atilio Corrêa Lima, 1940. The illustrations are, left, the detail of the entrance to the station. The long line of the building is broken on its surface by the serried rows of the brise-soleil. These are high enough up to give uninterrupted outlook underneath.

They provide ample sun protection and are controlled by a convenient lever. They are made of asbestos composition bound in steel. Plants and flowers are planted here, as in many Brazilian buildings. The rear elevation has equally good proportions and a pleasing frontage. Adjustable louvres keep the sun from the offices placed behind them. The projected window frame gives a feeling of unity to the entire frontage.



## Seaplane Station

Seaplane Station, Santos Dumont Airport, Rio de Janeiro. The same architect. This seaplane station is a model of its kind, but will only be used until a new airplane station is built by the brothers Roberto. The design is most original and in its lightness has captured the essence of the spirit of flying. It is better probably than anything that has been done so far in Washington or New York. The building is constructed of reinforced concrete and is covered with slabs of travertine marble imported from Argentina. The elegance of the spiral staircases, both inside and outside, is a notable feature, the one illustrated leads to the balcony restaurant. Sunblinds are of the Venetian type and unprotected from the weather. Below, the path to the embarkation pier is shaded from the glare of the sun by a very successful canopy, with diagonal steel supports. On the facing page, the bay facade from the other end showing the terrace with its winding stair and pierced opening through the lower floor, a device much favoured by Brazilian architects.



GROUND FLOOR



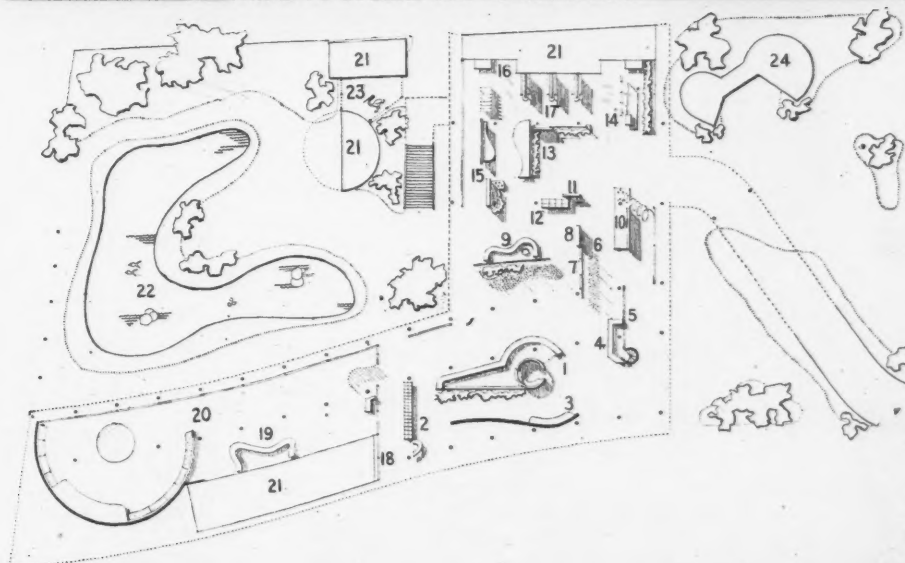


## Exhibition

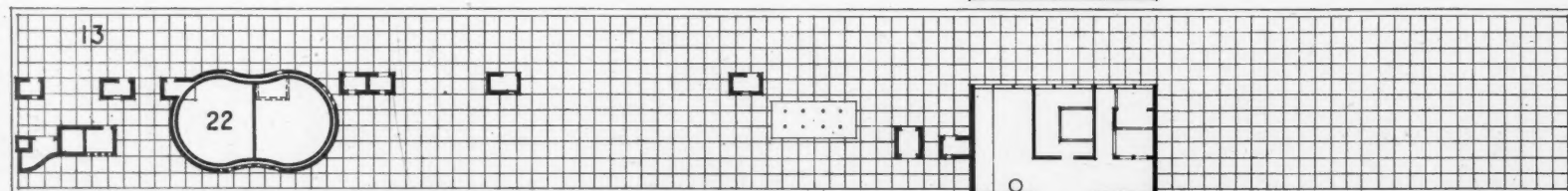
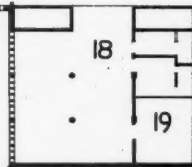
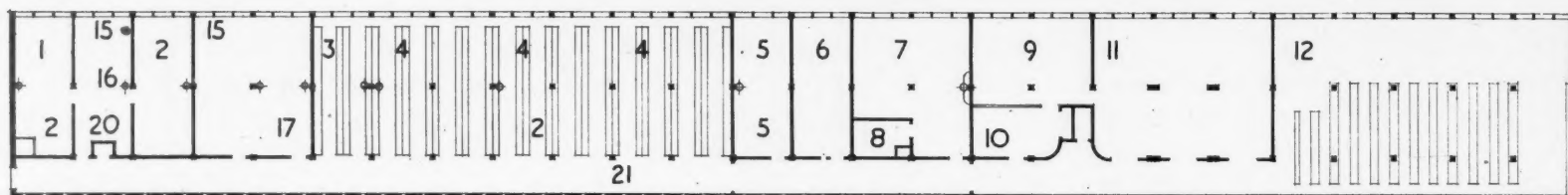
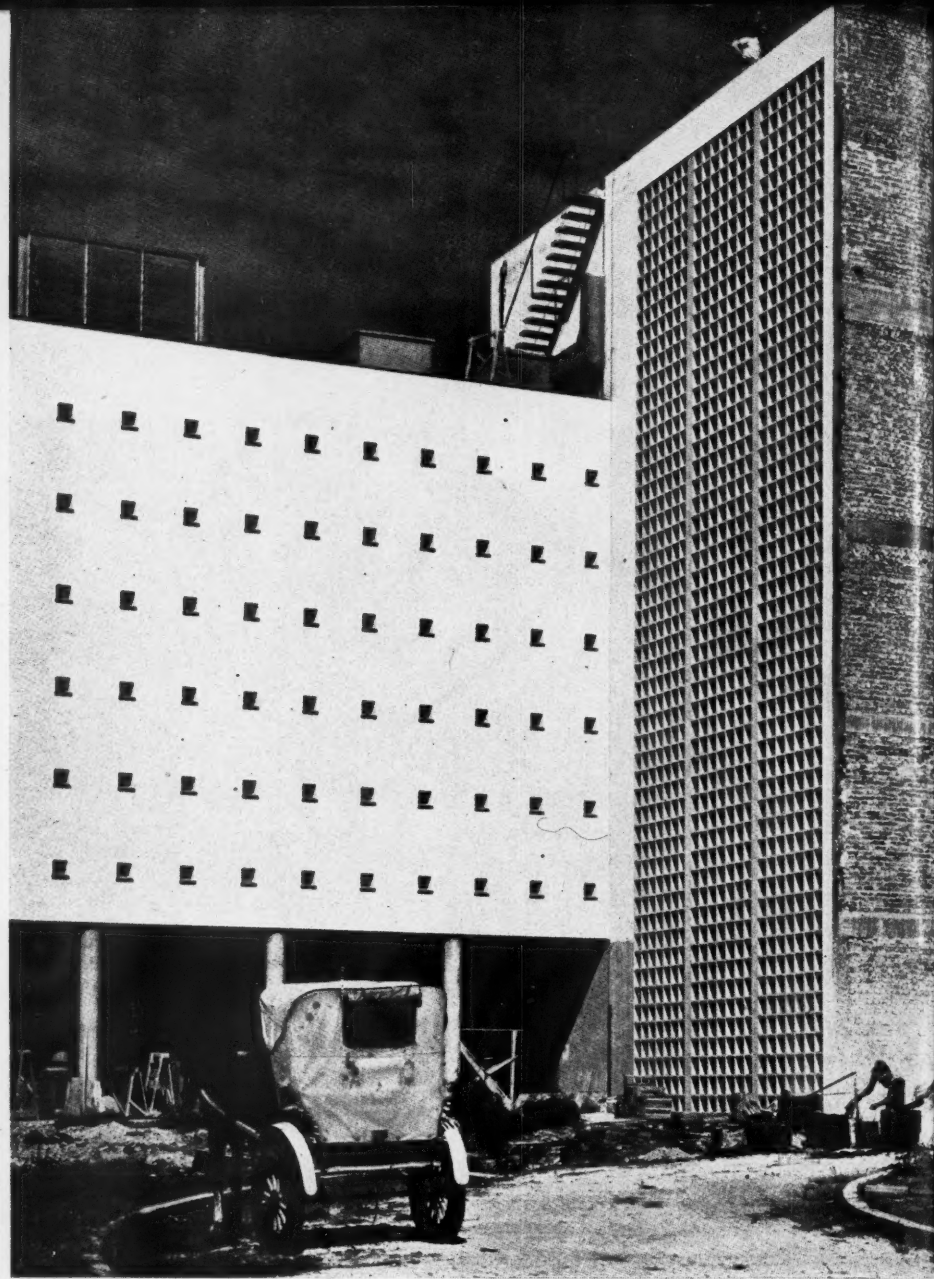
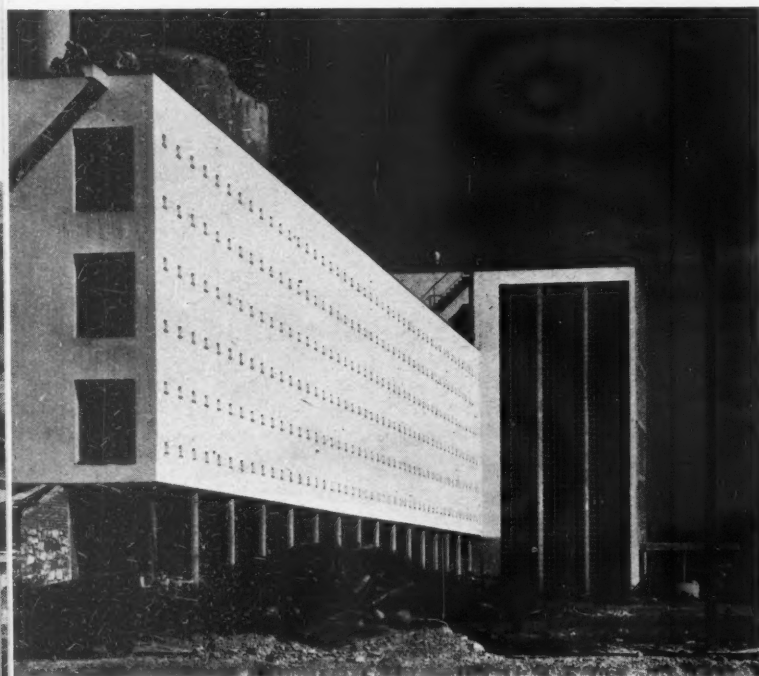
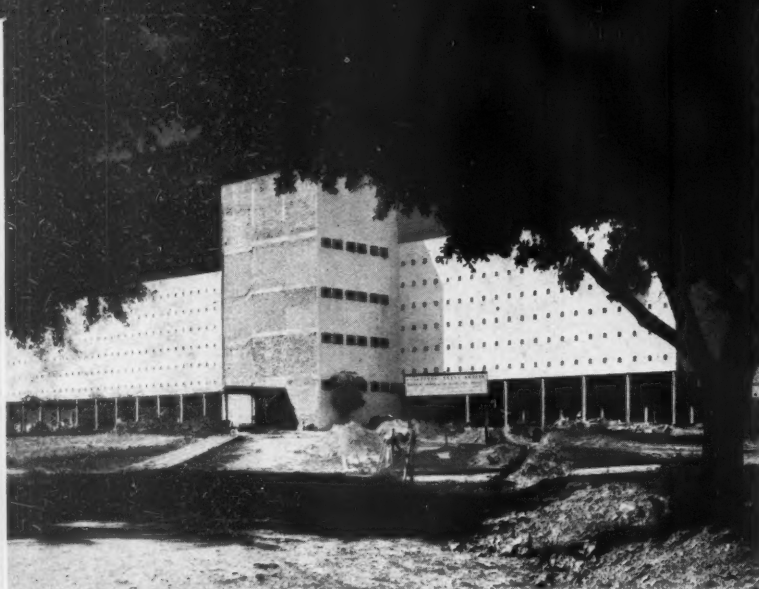
*The Brazilian Pavilion at the World's Fair in New York, 1939. Architects, Lucio Costa and Oscar Niemeyer with Paul Wiener. The Pavilion is distinguished by its frank acceptance of the fact that it was designed for a temporary purpose. The "cambogé," sun break, serves to keep the intense New York sun from the offices behind without losing light. The curved canopy, right, protects the main exhibition hall from the sun and has a pleasant spatial quality.*

### KEY TO PLAN

- |  |   |
|--|---|
| 1. Kitchen and bar of the café.  | 13. Cocoa.  |
| 2. Different types of coffee.  | 14. Smoke Vapour or Steam.                                |
| 3. Photographs of the process of growing coffee and putting it into sacks. | 15. Cotton.   |
| 4. Information.  | 16. Carnauba wax.   |
| 5. Comparative maps of Brazil and U.S.A.                                   | 17. Vegetable oils.                                       |
| 6. Sugar and alcohol.  | 18. Knife cases and helmets.                              |
| 7. Manihot.  | 19. Bar.  |
| 8. Guarana.  | 20. Restaurant.   |
| 9. Maté.   | 21. Service appurtenances.                                |
| 10. Fibres.  | 22. Tropical water lilies, Nenufares and Victoria Regina. |
| 11. Rice.  | 23. Tropical birds.                                       |
| 12. Chestnuts from Para.   | 24. Diorama of Rio de Janeiro.                            |







## Snake Bite

The Vital Brazil Institute, Niteroi, Rio de Janeiro. Architects, Alvaro Vital Brazil and Ademar Marinho, 1942. This magnificent laboratory for the preparation of snake-bite serum has several interesting features. The rows of small windows in the north facade light the corridors behind (top, left). The stairhall is contained in the massive projecting block in the centre. Reinforced concrete in skeleton construction is used here as in most modern buildings, the infilling between supporting members is usually of tile or concrete blocks. Cement is made in a huge plant near Niteroi. Exterior finishes are of stucco or veneered with stone or marble slabs. The illustration, right, shows the unusually free shape of the water tower on the roof. The end shows very large door openings, through which bulky equipment can be brought in from the outside by using the projecting beam. The laboratories are all on the south side of the building, that being the coolest side. The lower walls in this case are of rubble. The good old-fashioned horse buggy looks as much at home here as in front of an ancient fazenda.

### KEY TO PLAN

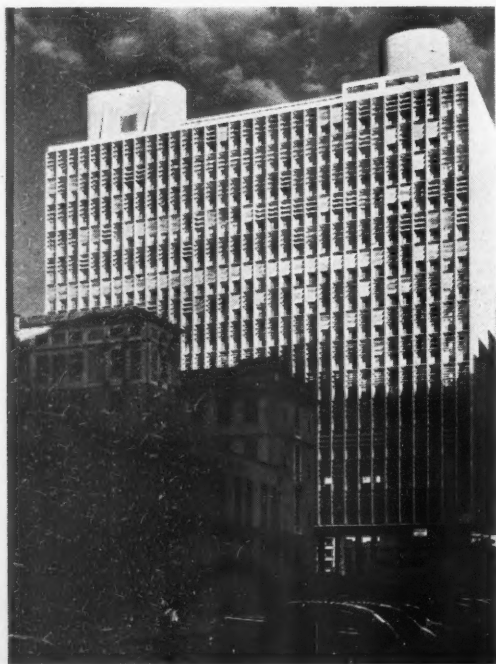
- |                          |                                |
|--------------------------|--------------------------------|
| 1. Isolation room.       | 13. Terrace.                   |
| 2. Dissection rooms.     | 14. Power house.               |
| 3. Animals reserve room. | 15. Washrooms.                 |
| 4. Analytical rooms.     | 16. Food preparation room.     |
| 5. Operating theatres.   | 17. Control and weighing room. |
| 6. Dormitory.            | 18. Hall.                      |
| 7. Studio.               | 19. Pantry.                    |
| 8. Dark room.            | 20. Dressing room.             |
| 9. Directors' room.      | 21. Gallery.                   |
| 10. Secretary's room.    | 22. Water tank.                |
| 11. Conference room.     |                                |
| 12. Library.             |                                |





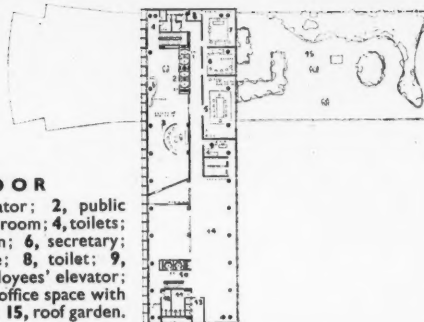
# Ministry

The Ministry of Education and Health, Rio de Janeiro. Architects, Lucio Costa, Oscar Niemeyer, Afonso Reidy, Carlos Leão, Jorge Moreiro and Ernani Vasconcelos; Le Corbusier, Consultant. Begun about 1937, still under construction. The Minister of Education and Health has certainly inspired the construction of a remarkable building. Most striking is the enormous "honeycomb" that shields the north side of the building. The north and south elevations are entirely of glass, the narrow east and west walls and the columns supporting the main block are veneered in pinkish-grey granite. The low block contains the auditorium and exhibition halls and is faced with specially designed blue and white tiles, which also form a great mural at the base of the west wall of the main building. The roof structures enclosing water tanks and lift apparatus have boldly curved outlines and are covered by vitreous blue tiles. Debret's quaint drawing of the primitive types of bee-hive dwellings he saw on his travels in 1820 is a fitting companion to this building, which might be described as a technically rather more highly developed example of the tree-house in the drawing.



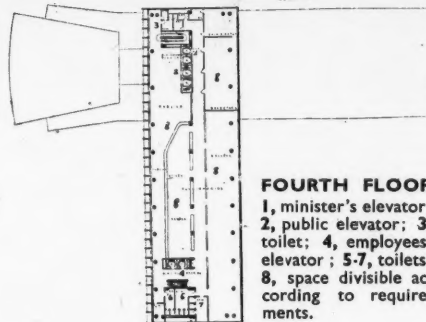
## THIRD FLOOR

1, minister's elevator; 2, public elevator; 3, waiting room; 4, toilets; 5, conference room; 6, secretary; 7, minister's office; 8, toilet; 9, assistant; 10, employees' elevator; 11-13, toilets; 14, office space with movable partitions; 15, roof garden.



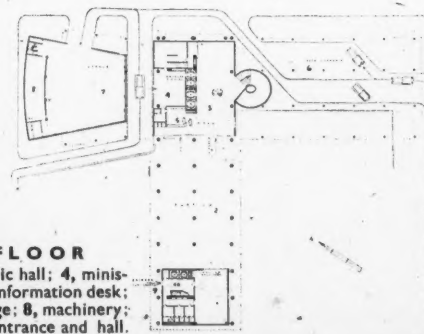
## FOURTH FLOOR

1, minister's elevator; 2, public elevator; 3, toilet; 4, employees' elevator; 5-7, toilets; 8, space divisible according to requirements.



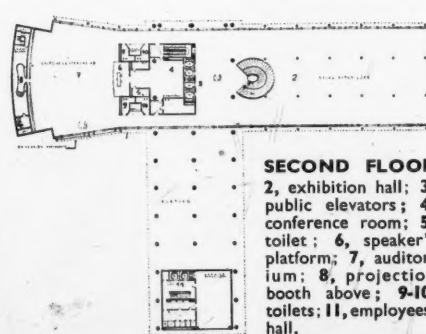
## GROUND FLOOR

2, portico; 3, public hall; 4, minister's entrance; 5, information desk; 6, parking; 7, garage; 8, machinery; 9-10, employees' entrance and hall.



## SECOND FLOOR

2, exhibition hall; 3, public elevators; 4, conference room; 5, toilet; 6, speaker's platform; 7, auditorium; 8, projection booth above; 9-10, toilets; 11, employees' hall.



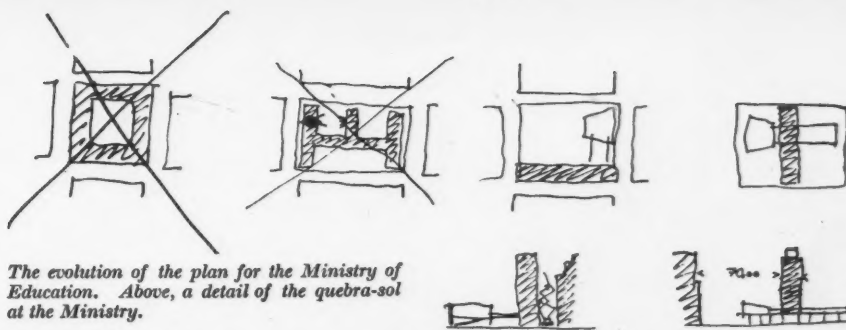


and gardenias, bamboos, lianas and mango trees. The organ cactus is in its proper setting; and not only the house but the garden courts may be said to open a new chapter in tropical gardening. Again, the plain white walls are quite beautiful against the foliage. The whole conception of this pair of houses and their gardens is original but, like all else, it has a precedent; that precedent is the classical landscape garden of Japan. We are reminded of the fifteenth century gardens of the monk Soami, in Kyoto. The Arnstein and Frontini gardens and their houses recall the temple gardens of Daisen-In and Ryuanji in Kyoto. Those are among the greatest aesthetic masterpieces of Japan, while these are the best modern architecture of our time.

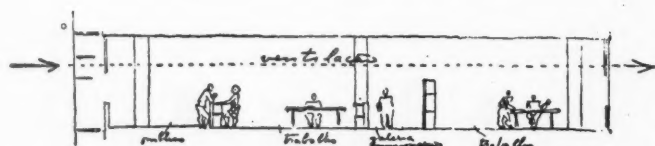
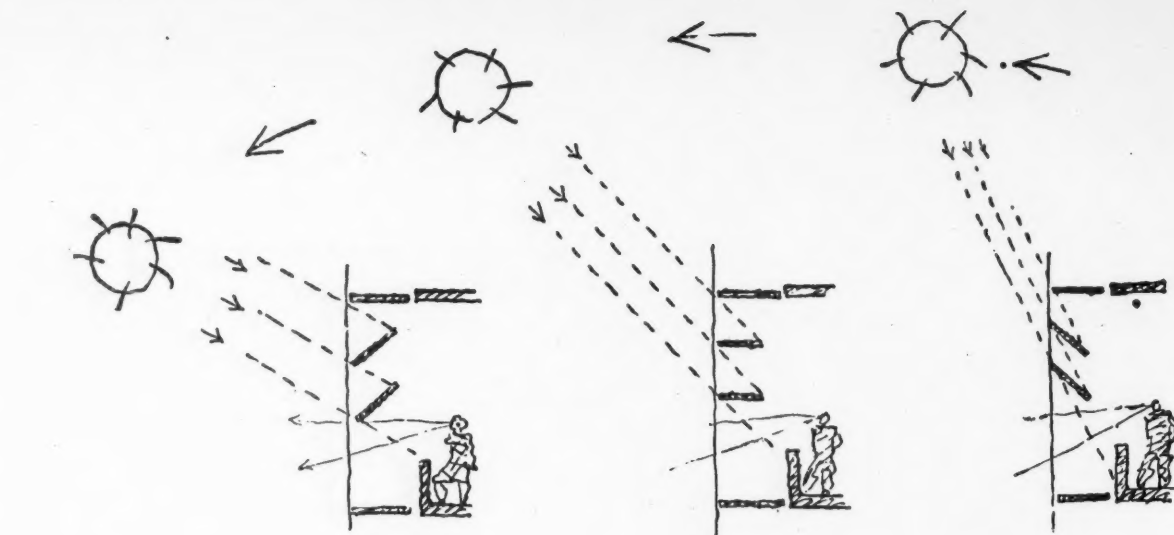
Brazil, then, has a strong native school of modern architects and it has profited by the visits of foreigners and European exiles. But, as a whole, it is a school of architecture. Of what other country can it be said that some of its best buildings were finished but three years ago? The Raul Vidal Elementary School, the Ministry of Health and Education, both in Rio; the experiments of Niemeyer at Belo Horizonte; the houses of Rudofsky at São Paulo; such are the summits of this achievement. They are most promising, coming from a land bigger in area

than the United States, half as big again as Western Europe, and with a population of over forty millions. In this crucible of races we may expect other things as well as architecture to emerge. More than all else, it may be, music. Brazil has already one remarkable composer, Vila Lobos, and a decorative painter, Portinari. Younger painters and sculptors will, in all probability, appear. If once again, after a century or more of death throughout the world, architecture has come to life, then the emergence of painters and craftsmen will not be sporadic. They

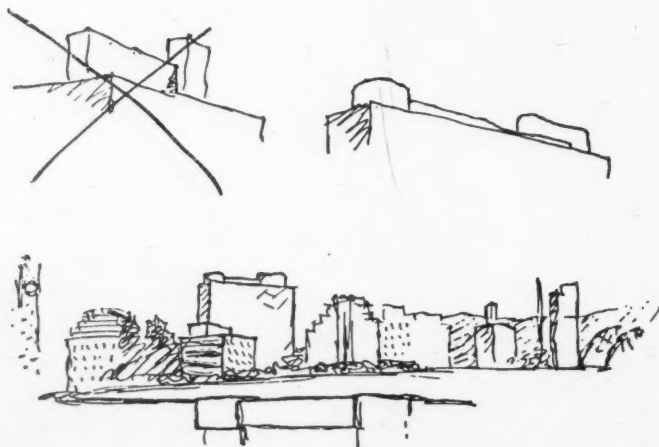
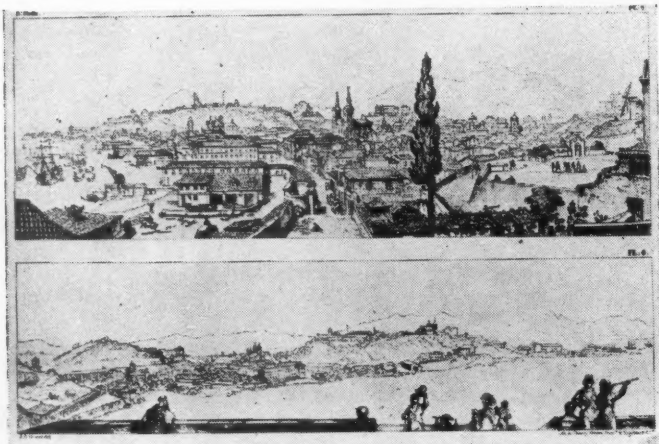
will fill their place against their proper background, in a way that has been impossible since the Napoleonic wars. In this sense, architecture is the most important of all the arts. Once that is established, the rest is natural and spontaneous; and composer, writer, painter, are no longer freakish and isolated figures. It would certainly seem as if in Brazil, architecture, the Sleeping Beauty, was stirring after her slumber of a hundred years. She has woken during the World War. But here are her buildings, and they should inspire us when the war is won.







The drawings show the cantilever system in the Ministry of Education that works three horizontal louvers across the top of the windows and deflects light as required. The louvers are of asbestos in steel frames painted blue, admit plenty of air but reduce glare.



A study in contrast—the sky-line of Rio in the eighteenth century and to-day. Niemeyer's deliberately free treatment of the Ministry of Education's water tanks on the roof of the building is shown by trial and error.

## THE ARCHITECTS AND THE MODERN SCENE

by G. E. Kidder Smith, A.I.A.

[Author's Note. The following material was gathered by the author and Mr. Philip L. Goodwin, A.I.A., for an exhibition at the Museum of Modern Art in New York entitled "Brazil Builds." Besides the exhibition itself Mr. Goodwin wrote a volume bearing the same title. This was reviewed in THE ARCHITECTURAL REVIEW for May 1943. The following observations are presented to the Museum, and Mr. Goodwin, with sincerest gratitude for making this trip possible for the author. G.E.K.S.]

Of all the countries in the world, there are only two, the Soviet Union and China, which are larger in area than Brazil. This immense land, bigger than the United States, is half again the size of all Europe this side of Russia. Although founded only eight years after Columbus landed in the Bahamas, Brazil as a country of the twentieth century is only now beginning to realize its possibilities and hint of modern maturity. Indications of its future greatness can be clearly seen in its present accomplishments.

The country begins slightly above the Equator (the same parallel as the "bulge" of Africa) and unrolls over the greatest continuous forest known to man—plus some of the worst hills—for about twenty-five hundred miles. It lies entirely east of New York. Along the Atlantic periphery of this sprawling country will be found palms and soft trade winds, yet only a relatively few miles away, the angry, desolate hills of Minas Gerais frighten with their bleak hostility.

Leaving the coast and flying southward, one sees ahead jagged peaks and ridges; skimming these the world drops away into nothingness, and eight thousand feet below lies Rio and its winding beaches. There will be found the incredible landscapes, with mountains of granite springing forth from smooth white sands and thick jungles tumbling into the very city itself. Three hundred and fifty miles to the west on a high plateau and set some miles back from the sea, São Paulo rests on a rolling plain, surrounded by factories and growing industries.

The climate of this diverse landscape naturally ranges, but one can say that Brazilian weather goes from agreeable mildness to real heat. Frost is almost unknown except in the south and upland, yet in winter, even in Rio, there is occasionally a chilling dampness—followed the next day by sunny swimming. The coast is pleasantly tempered

by a well-nigh constant trade wind.

The co-operative temperature, backed by abundant rainfall, encourages a plant life so obstreperous that gardeners are employed not to culture but control. There is a steady "back-to-the-city" movement on the part of the local vegetation.

Brazil is a land of amazing contrasts and beauties; a land of resources yet of want; variety (of landscape), sameness (of weather). Its architecture is bound up in these physical conditions, and at its best expresses them admirably.

Because of the temperateness of the climate, there are no heating systems (except in few instances); because of the absence of frost, concrete can be exposed in manners unknown in northern zones. The torrid heat demands some form of protection from the blazing sun; rains of sudden intensity suggest raised ground floors or protecting arcades. Another physical factor in the development of the architecture can be seen in the lack of well-developed overland transportation, which has produced a cultural insularity at several centres, except when political influence has favoured more remote districts.

Although carpeted by endless trees—the name "Brazil" comes from the red dyewood—wood, as a building material, is only little used. One reason advanced for this paradox is that the jumble of trees is so overwhelming that foresting on a commercial scale is difficult. Then, too, transportation, except by boat, is non-existent between the North, where the best stands are found, to the South, where construction flourishes, and where stones are almost everywhere.

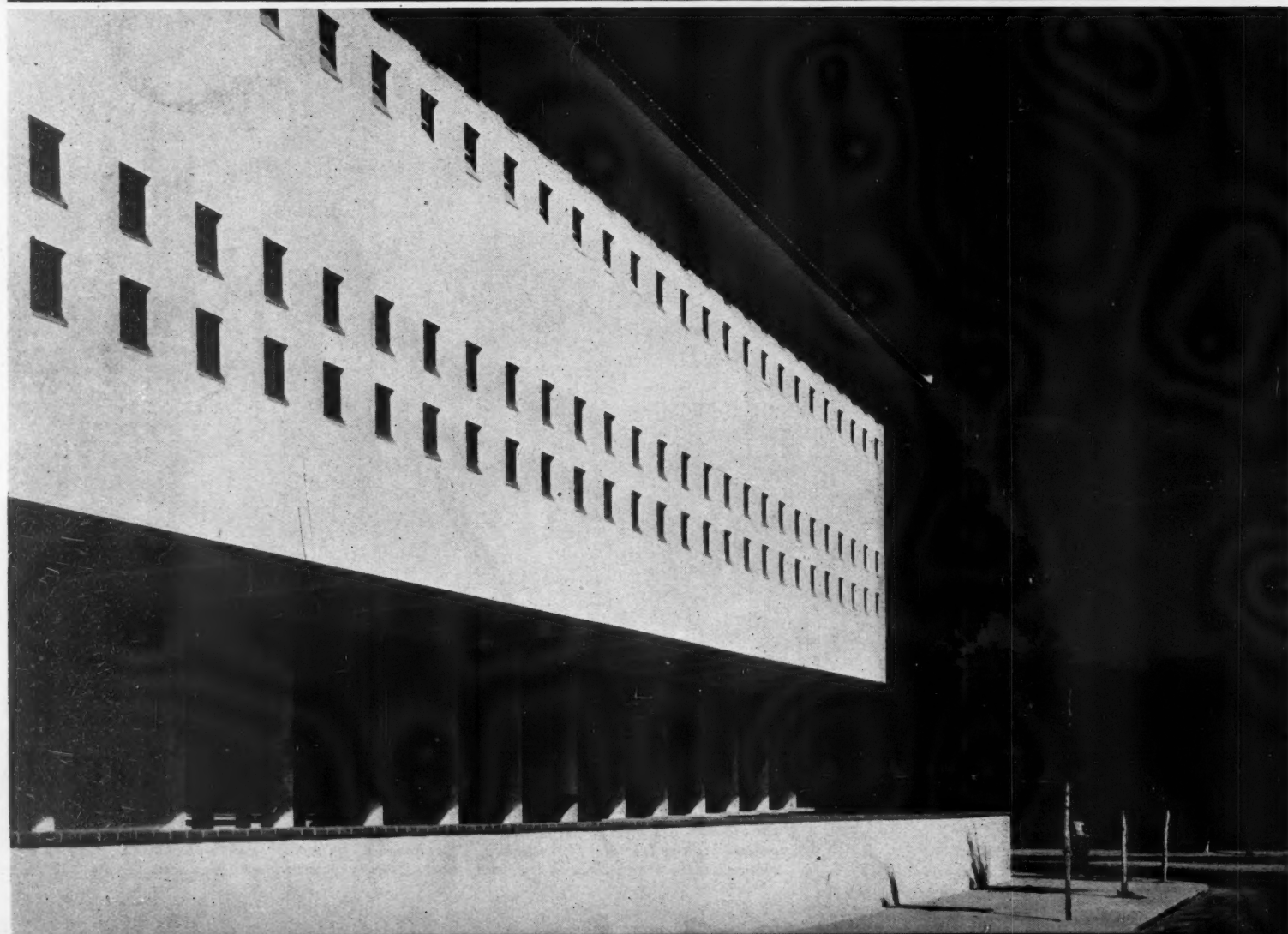
One of the world's most gigantic ore deposits lies under Brazil's hills, yet steel in structural sizes is almost unknown. Only now are the mills and machinery being erected which will permit rolling of large members at home. Thus far only reinforcing bars and secondary shapes are locally pro-



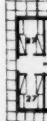
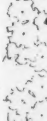
## School

*Raul Vidal Elementary School, Niteroi, Rio de Janeiro. Architect, Alvaro Vital Brazil, 1942. Schools are much in demand in Brazil where a large part of the population is comparatively illiterate. There is thus a large school-building programme. Had this building been an ordinary solid block it would have obscured the lovely view over Rio bay. The architect elevated the main part of this school and provided a shady terrace for rest and play while also preserving the outlook. The two wings are joined by the pleasant passage-way, above, leading from school to auditorium-gymnasium. Below, the playground. The columns with their seats cast in one are original and useful. Page 80, top. The cool side of the school on to which the classrooms open; the projecting eaves give added shelter. All the trees have been preserved and add to the friendly atmosphere. The corner view, bottom, shows small windows on the sunny side, giving enough light to corridors and allowing classrooms to be thrown open to the breeze.*

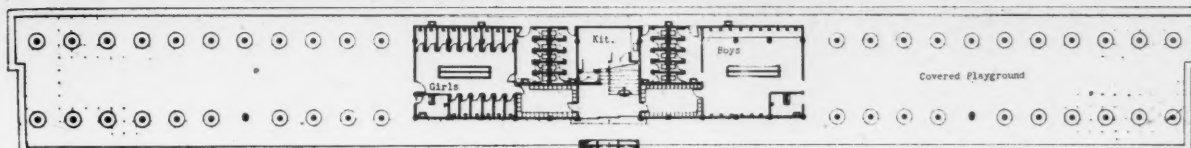




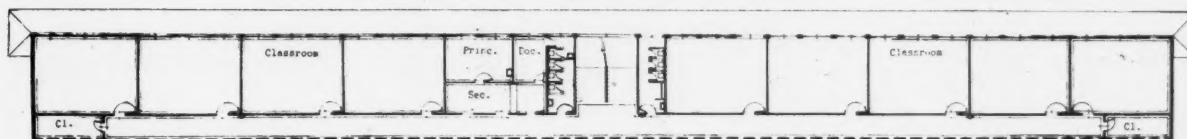
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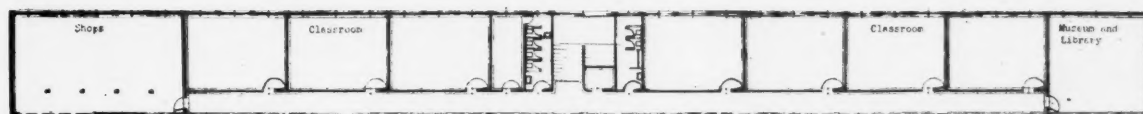
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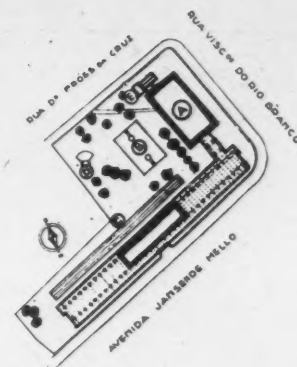
FIRST FLOOR



SECOND FLOOR



THIRD FLOOR

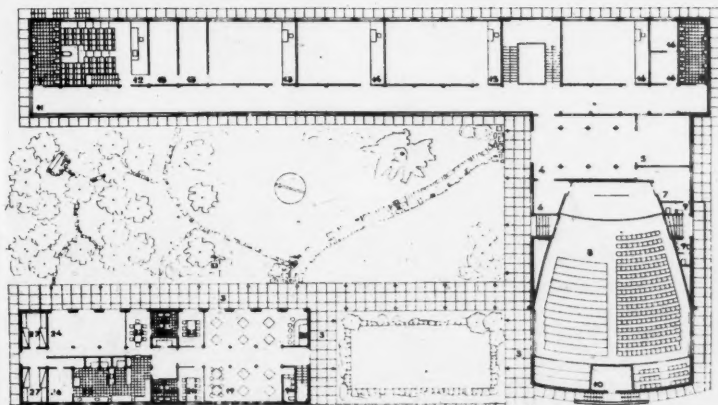


PLOT PLAN

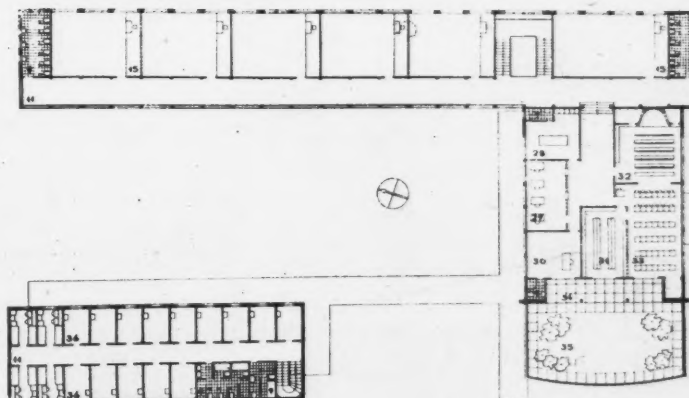
A, gymnasium ; B, basket ball ; C, track ; D, high jump ; E, broad jump.

## School

*Instituto Superior de Filosofia, Ciências e Letras, "Sedes Sapientiae," São Paulo. Architect, Rino Levi. One of the best of the new schools is this one by an architect who has also built very large theatres and hotels. The plans show the general lay-out and the handling of the trees, which have been allowed to live almost inside the classrooms and abolish any feeling of an "institution." The open passageway lining two sides of the school court is protected by an unusual canopy. The airiness of the classroom block is a great contrast to the heaviness of the canopy. Only a light concrete grille fills the concrete frame of the building. As shown on the next page, top, left, the cast concrete wall of the main wing lights the corridors behind. The three upper rows of squares on each floor are set at an angle so that they are always open for ventilation.*

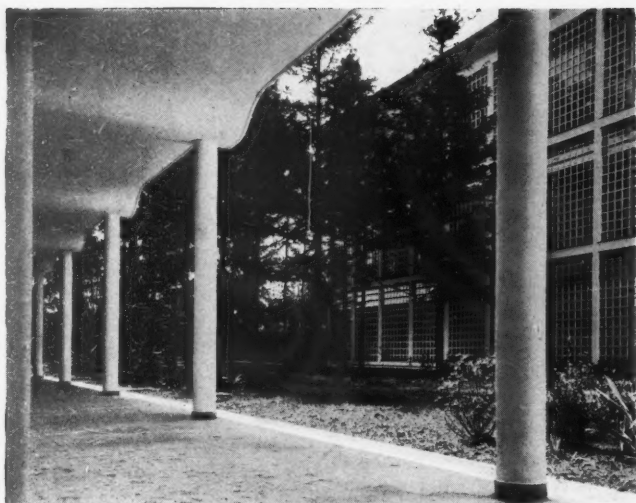


GROUND FLOOR

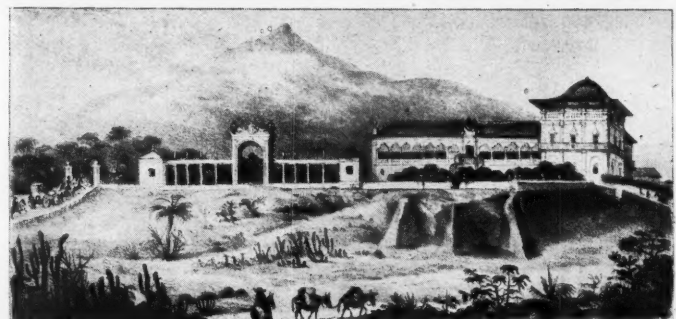


FIRST FLOOR



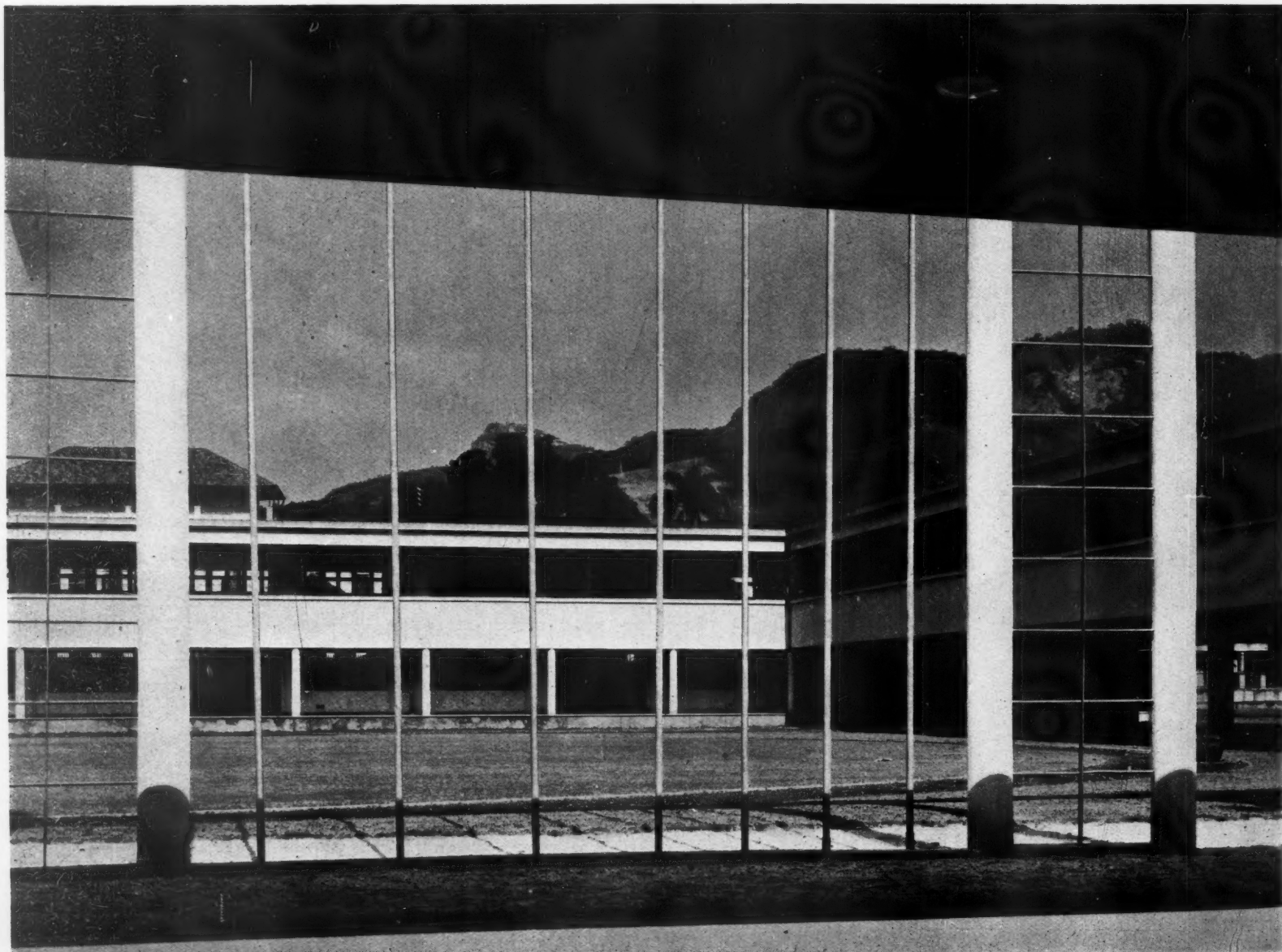


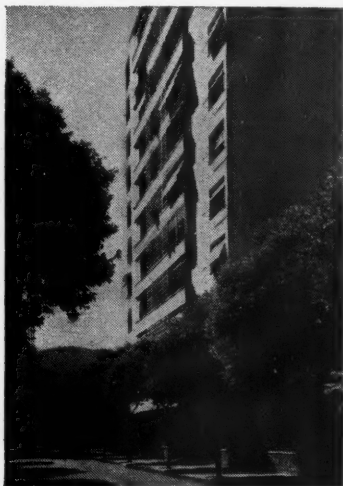
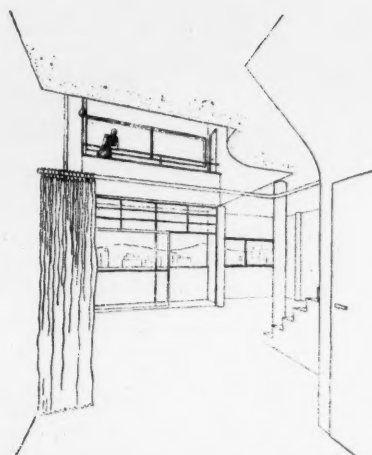
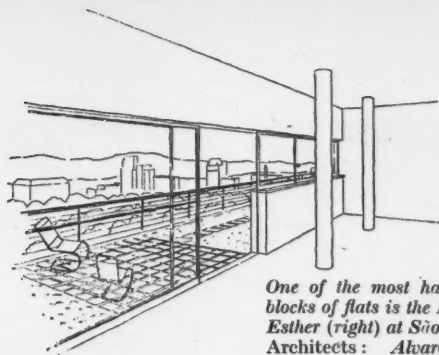
Inside the court of the Sedes Sapientiae School, looking towards the grove of trees.



## School

*Industrial School at Rio de Janeiro. Architect, Carlos Henrique de Oliveira Porto. A very large and well-planned school for industrial studies, shows how effective complete absence of fussiness can be. A good example, too, of the interplay of landscape and building, but such uncompromising horizontality would not really be successful without the foil provided by the broken mountainside. Some of the athletic apparatus is illustrated in the view below, which shows the secondary wing beyond. In the drawing on the right the same landscape is shown as background to another kind of building, the former Imperial Palace, now the National Museum. The gateway is a replica of that of Sion House, and was a present from the Duke of Devonshire to King João VI. It is the only work of Robert Adam in South America. It is still there.*





One of the most handsome blocks of flats is the *Edifício Esther* (right) at São Paulo. Architects: *Alvaro Vital Brazil* and *Ademar Marinho*, 1937. This has a somewhat gaudy exterior with black glass and stone veneered facade. The building behind it by the same architects seems to have been jammed rather too tightly against the first block. The whole front is cantilevered giving unobstructed views from within. The well-proportioned living and bedrooms have wide windows opening through continuous bands of horizontal sliding steel casements and are protected by roll-up wooden awnings. Luxurious pent-houses have their own terrace gardens on the roof. Centre, right, a block of fairly commonplace design but enjoying a magnificent position overlooking the bay of Rio, and surrounded by towering tree-covered hills. Bottom, left, apartments at 97 Rua Bolivar, Rio. Architect: *Dr. Saldanha*. An attractively designed block with a particularly well-conceived entrance. The concrete grille that makes continuous horizontal decoration gives air without sacrificing privacy and provides an enlivening touch by acting as trellis for climbing plants and flowers. Bottom, right, apartments at 322 Praia Do Flamengo, Rio. These flats have combined balcony, living and dining-room overlooking Flamengo Bay. Awnings over the opening and sliding louvres in the centre section, give through ventilation, while the windows also slide across. Thus complete ventilation without direct sun is obtainable.



duced. Because of this lack the Brazilians have had to turn largely to concrete buildings; this development has had the most important architectural consequences.

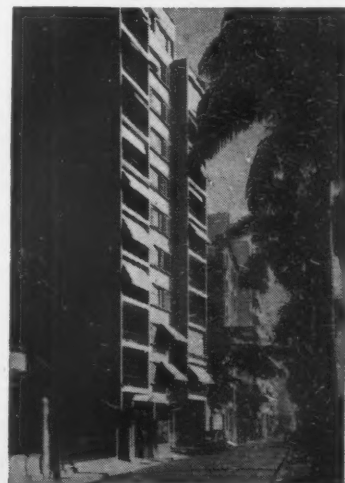
To look back to their architectural inheritance, we find that Brazil has assimilated three main influences up to the present day. The first of these is the old Portuguese tradition, pronounced and insistent for several centuries. When the early settlers came over from Portugal at the beginning of the sixteenth century, they found a climate and physical conditions not unlike those they had left, hence the architecture of that time reflects directly the native Portuguese. (As contrast, the North Americans found different problems both in the North and in the South, so American colonial buildings were distinct modifications of more or less English styles.) Most of the old buildings left to-day are grouped around the north-east of Brazil, jutting out towards the mother country, together with some in the hill towns where gold attracted many adventurers.

Ouro Preto was founded, flourished and withered in the eighteenth century.

Although over two hundred miles from the sea, and reached by the roughest of mule trails, this town grew from nothingness to a population of about twenty thousand in fifty years. Gold and diamonds were the lure, and every type of man—from priests to prospectors, flocked to this promising bonanza. After three-quarters of a century, the near surface wealth was picked over and an exodus began. However much deserted the town reaped well, for the wealth of the century blossomed forth into a magnificent array of churches. To-day the whole town is a museum, and nothing can be built, altered or taken away without permission. The charming result is that each of Ouro Preto's many hills and vantage points is crowned with a jewel of a church, each satisfyingly placed to command some view over the valley or village below. Seen in the distance, this mountain town folded over the side of numerous lesser hills, is one of architecture's great sights.\*

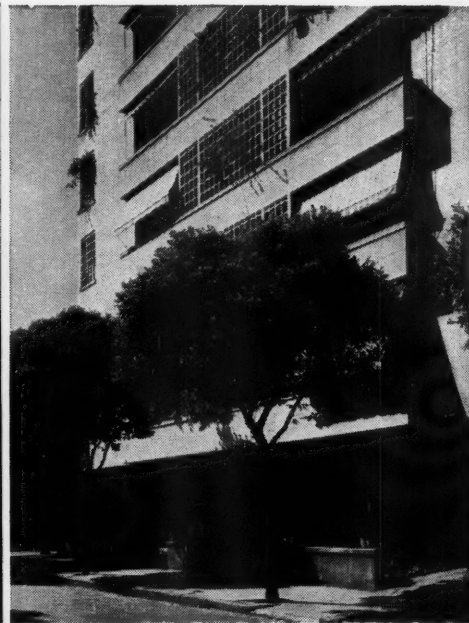
Beside the native Portuguese which characterizes most of Ouro Preto's churches—a style restrained without

but giddily rampant within—the private houses and public buildings are primarily Portuguese in inspiration. This is of course true of other cities as well, and even to-day one can see these delightful old buildings, many charmingly coloured, all somehow seeming to be very much a part of the life of that



\* See water-colour and photograph on pp. 66, 67.





Close-ups of the flats in the Rua Bolivar by Dr. Saldanha, as shown on page 83, with details of window treatment and the entrance. The latter is certainly devoid of the pomposity so often met elsewhere and invitingly simple and friendly. The trees have been carefully preserved and garden space for cacti and flowers is planned and cultivated. A well-clipped hedge gives a trim finish to a very urban scheme.

time. The second main influence in Brazilian architecture, prevalent in one form or another, is the perennial Renaissance. This is still unfortunately popular in some circles of dubious vision, but its days are numbered. The northern cities of Belem, at the mouth of the Amazon, and Recife (Pernambuco) have perhaps the best examples of the early and middle Brazilian Renaissance. Rio and São Paulo, however—the “cultural centres”—are debauched with all manner of tortured shells of monumentality, the latest and largest of which, Rio's Ministry of War, is not even completed. Added to the pretentiousness of much of the public building of the last fifty years, seemingly on a happy decline, there can be found a splendid array of torrid zone fantasia, plus all manner of twisted cupids and incredibly romantic villas. However, the spreading luxuriance of the native plant life has the situation well in hand.

The last and most promising school of thought, the one that primarily concerns us, is the modern, and it is producing designs of great ability and refreshing imagination. Led largely by the brilliant mind of Lucio Costa, a great scholar of (unfortunately) almost hermitic seclusion, a younger group of architects has been recognized in the last five or six years. It is difficult to pin down exactly the many individual influences which merge into Brazil's present architecture. Costa is certainly one of the strongest. His former years as critic of the School of Fine Arts in Rio were most beneficial. His work now is largely with the Serviço do Patrimônio Histórico e Artístico Nacional (S.P.H.A.N.), although he is still consultant on other problems.

Le Corbusier's influence is also apparent. His actual visit to Rio in 1936 and his early suggestions for the Ministry of Education Building were of great significance, and more than any other foreign architect, he has been

most studied and absorbed. However, it should not be assumed that he left the Brazilians with a portfolio of “partis” which they could carefully copy. Corbusier's influence has been strong, especially with Niemeyer, but it has been an inspiration of ideals, not of clichés thrown together in the accepted manner. The product has always been distinctly Brazilian.

Some of the younger men have also studied in France and seen the better work there; others have been to Italy. The United States has contributed impressively little except by way of mechanical equipment. English, Swedish and Swiss ideas are apparent to varying degrees.

The modern movement came about largely as a spontaneous reaction to the rather untenable architecture springing up about the country. This new movement built up vast strength in a quiet way and burst upon the world with a maturity which seemingly dispensed with any awkward adolescence. Its protagonists had so studied the problems involved that they were assured of an initial success. The Ministry of Education is, I think, one of the finest buildings to be found in the world. The Arnstein house in São Paulo is an almost equally imaginative and brilliant solution to its particular problems.

Climate has undoubtedly been one important factor in encouraging new ideas. It also became increasingly obvious that “Renaissance,” “Colonial,” or “Moderne” were completely unsympathetic to and incapable of self-effecting any basic change which would permit a logical solution to problems which became more serious and inescapable as a small-scale residential city found itself growing into a metropolis, and its small-scale buildings became skyscrapers. The shell of the Renaissance is simply incapable of being so expanded.

To control sunshine and heat there

was nothing which could be done except to start afresh with common sense, fortified by an exploration into technical requirements. A number of interesting solutions have been reached, most of them modifications of two basic types. One of these is the pierced concrete screen, or *cambogé*; the other the *brise-soleil* or outside louver—a kind of outboard Venetian blind. The “*cambogé*” is a modern interpretation of the traditional wood grille found in many old buildings, not only in Brazil but in many similar climates, especially the Near East. Sometimes they are used in their original form as in the Ouro Preto hotel; mostly they are cast directly in concrete in a more squared away fashion. The *brise-soleil*, a name more commonly used than the Portuguese *quebra sol*, followed a natural evolution. The strong sun must obviously be kept from beating directly into a room; Venetian blinds accomplish this, but the heat generated by the sun on the glass, plus the sun hitting the blinds themselves, make these blinds in effect radiators, giving off and circulating heated air. The placing of some form of sun-interceptor before the glass is therefore quite logical. These outside sun-breaks take several forms, depending primarily on the orientation of the building to be screened. Some are fixed vertical louvers, others adjustable vertically, but most are of the horizontal adjustable type. As can be seen in the photographs, some form of sun protection can be found on most of the modern buildings.

Another factor which has played an interesting part in the development of modern Brazilian architecture is a political one. Each minister seemingly controls—or shall we say “inspires”—the design of the new buildings in his department. One of these, Gustavo Capanema, the Minister of Education and Health, is a singularly forward-looking and cultured public official, and

it was largely under his aegis that the Ministry of Education took its present form. In addition to this the whole Niemeyer designed development at Belo Horizonte (350 miles north of Rio) can be traced directly to his patronage. Sr. Capanema has not been without opposition—politics have maddeningly delayed the Education Building—but the Vargas regime, which has done much for the country, has been fortunately interested in this new architecture. Its future holds promise.

However, Capanemas are not many in Brazil, and architecture being thus a ministerial whim, the greatest stylistic unhappiness and confusion have resulted. To make matters worse, there has been no master plan for the evolution of a government centre; as a matter of fact there seems to have been no plan at all. In a city as naturally beautiful as Rio, this wasted opportunity represents a dismal lack of foresight which no manner of Hausmannian boulevard cutting can really solve. To place the dull, vapid Ministry of War across the street from the highly stimulating and altogether different Ministry of Education, with neither of them bearing any relation to each other's or the city's possibilities, is obviously worse than unfortunate. With the beautiful setting, the many bays, mountains, beaches and trees, so much could have been done. Perhaps when present plans are carried through an improvement will be realized, but much has already been lost, and unless some central authority is set up to establish a real city plan for co-ordinated building, Rio will be a monument to lost opportunities.

The political gropings in planning contrast poorly with the matured sureness of the architecture. Obviously it is in their individual buildings that we can find much of what Brazil has to offer, and it is to them that this issue has been given up.

# ANTHOLOGY

## Brazil

Brazil, a republic of South America, is the largest political division of that continent and the third largest of the western hemisphere. It is larger than the continental United States excluding Alaska, and slightly larger than the great bulk of Europe lying east of France. Its extreme dimensions are 2,629 miles from Cape Orange ( $4^{\circ} 21' N.$ ), almost due south to the river Chuy ( $33^{\circ} 45' S. lat.$ ), and 2,691 miles from Olinda (Ponta de Pedra,  $8^{\circ} 0' 57'' S.$ ,  $34^{\circ} 50' W.$ ) due west to the Peruvian frontier (about  $73^{\circ} 50' W.$ ).

A relief map of Brazil shows two very irregular divisions of surface: the great river basins, or plains, of the Amazon-Tocantins and the River Plate, which are practically connected by low elevations in Bolivia, and a huge, shapeless mass of highlands filling the eastern projection of the continent and extending southward to the plains of Rio Grande do Sul and westward to the Bolivian frontier. Besides these there are a narrow coastal plain, the low plains of Rio Grande do Sul, and the Guiana highlands on the northern slope of the Amazon basin below the Rio Negro.

Brazil is not only marvellously rich in botanical species, but included at the beginning of the 20th century the largest area of virgin forest on the surface of the earth. The flora falls naturally into three divisions: that of the Amazon basin where exceptional conditions of heat and moisture prevail; that of the coasts where heat, varying rainfall, oceanic influences and changing seasons have greatly modified the general character of the vegetation; and that of the elevated interior, or *sertão*, where drier conditions, rocky surfaces, higher sun temperatures and large open spaces produce a vegetation widely different from those of the other two regions. Besides these, the flora of the Paraguay basin varies widely from that of the inland plateau, and that of the Brazilian Guiana region is essentially distinct from the Amazon. The latter region is densely forested from the Atlantic to the Andes, but with a varying width of about 200 miles on the coast to about 900 miles between the Bolivian and Venezuelan *llanos*, and thus far civilization has made only a very slight impression upon it. Even where settlements have been located, constant effort is required to keep the vegetation down. Along the coast much of the virgin forest has been cut away, not only for the creation of cultivated plantations, but to meet the commercial demand for Brazil wood and furniture woods.

The racial character of the people is not uniform throughout the republic, the whites predominating in the southern states, the Indians in Amazonas and probably Matto Grosso, and the mixed races in the central and northern coast states. The excess of whites over the coloured races in the southern states is due to their smaller slave population and to the large number of immigrants attracted to them.

Down to the beginning of the 19th century the white colonists were almost exclusively Portuguese. The immigration from countries other than Portugal during the first half of that century was small, but before its close it increased rapidly, particularly from Italy. Fully nine-tenths of these immigrants, including those from the mother country, were of the Latin race. The introduction of African slaves followed closely upon the development of agricultural industries, and continued nominally until 1850, actually until 1854, and according to some authors until 1860. About 1826 it was estimated that the negro population numbered 2,500,000 or three times the white population of that period. The unrestricted intermixture of these three races forms the principal basis of the Brazilian population at the beginning of the 20th century. Brazil has never had a "colour line," and there has never been any popular prejudice against race-mixtures.

From THE ENCYCLOPÆDIA BRITANNICA.

## MARGINALIA

### Supplementary Forestry Report

A supplementary report to that issued last June on post-war forest policy has been published by the Forestry Commissioners (Cmd. 6500, price 2d.). It embodies in an agreed scheme of State assistance, the results of discussions the Commissioners have held with representatives of the Central Landowners' Association, the Scottish Land and Property Federation, the Land Union, the Royal Scottish Forestry Society and the Royal English Forestry Society to explore further the views of owners of private woodlands. It is proposed that all woodlands suitable for timber growing should either be dedicated to that purpose by the owner, who would work to a plan approved by the forest authority, or be acquired by the State. The proposals for

State assistance for dedicated woods, alternative to those in the original report, are given.

It is recommended that assistance of £7 10s. per acre be offered for the planting of small woods, which though not suitable for dedication will be available for timber supply purposes.

### Colour Exhibition

The object of the British Colour Council's *Colour in Everyday Life* Exhibition held last month at the Royal Academy was, as Lord Derby expresses it in a foreword to the catalogue, "to show the people of this country the place of colour in national life, its significance to industry, its contribution to the war effort and its vital importance in post-war days, both at home and abroad."

The Gallery devoted to *Colour in the Home* was perhaps the most

interesting, at least to the architect, and showed the decoration of a dining room, lounge, nursery and linen cupboard, designed by Brian O'Rorke.

### CORRESPONDENCE

#### The Editor

THE ARCHITECTURAL REVIEW  
SIR,—The first sentence on page 147 of the December, 1943, number of *The Architectural Review* begins:—"The original D.I.A. slogan that function equals beauty . . ." That is an error. In the opening lecture of a series on principles of design given by the D.I.A. at the School of Economics on January 14, 1925 (reprinted in its pamphlet *Right Making* in 1927), the following statement was made: "The D.I.A. does not believe that satisfactory fulfilment of the things suggested in fitness for purpose, fitness for materials and fitness for tools, will ensure fine and beautiful design, but it does

believe that through them a wide improvement in design may readily be made." As a matter of history, and in fairness to the D.I.A., the mistake should be corrected.

When a slogan was under discussion at an early meeting of the committee of the D.I.A., a witty member remarked that the statement (function equals beauty) was probably very unkind to Mary Ann in the kitchen, and it was certainly untrue.

Yours faithfully,

B. J. FLETCHER.

(Mr. Fletcher has been a subscriber to *The Architectural Review* since its start—forty-seven years.)

### The Historic Monuments of Sicily

#### Official Report on War Damage

[As the war has now moved away from Sicily, the War Office has prepared its report on the damage sustained by the historic monuments in that island, and here it is in full. A similar report has been prepared on the war damage to historic monuments in South Italy, and this will be published in next month's issue of THE ARCHITECTURAL REVIEW.]

The first official report on the damage done by war to the artistic monuments of Sicily will relieve a good deal of the anxiety that has been felt on this subject.

For more than a year, while the war in North Africa was in progress, Axis convoys on their way to Africa sheltered in the Sicilian ports, Axis aircraft from the Sicilian landing grounds set out to harass our shipping and to bombard the island of Rhodes. Consequently the harbours and the airfields of Sicily were a legitimate and a necessary target for our bombers. Then came the Sicilian campaign, the island was turned into a battle-ground for the land armies, and to aircraft bombs were added the shells of the artillery of both sides as each disputed town in turn fell into our hands. The principal towns of Sicily, and those which contain its chief monuments, lie on the seaboard and are precisely those harbour towns which had to be attacked. Inevitably many buildings have suffered and a few have been totally destroyed, these being such as stood nearest to the docks, but so far as our air bombing was concerned the utmost care was taken to avoid unnecessary damage, and the main treasures of Sicilian architecture have escaped astonishingly lightly.

The Greek and Roman ruins, the great temples of Girgenti, Selinunte, Segesta and Syracuse, the theatre of Syracuse and the rest, have suffered no hurt at all from war or from the passage of troops, and that in spite of the fact that the Girgenti temples were organized by the Italians for defence. At Syracuse refugees who took shelter in the theatre, amphitheatre and catacombs have left litter and did some minor damage to the catacombs, but little that cannot quickly be made good.

Not less famous are the Norman buildings at Palermo with their wonderful twelfth century mosaics; the loss of these would have been irreparable, but fortunately they are almost without exception intact; at the worst, doors and windows damaged by blast have to be made good and the tiling of the roofs to be patched. Only the Magione, remodelled and bereft of its mosaics—



has been destroyed, its twelfth century apse and modernized façade alone remaining; it is a relatively small loss when we have the Martorano, the Cathedral, the Palazzo Reale with its Capella Palatina, San Cataldo, San Giovanni degli Eremiti and Monreale still surviving in their splendour. At Cefalu the magnificent Norman Cathedral is intact, and lesser Norman monuments outside the main cities, such as the castle at Paterno, have not suffered.

Of the mediaeval buildings at Palermo the church of the Annunciation was completely ruined. The churches of San Francesco and Sta. Maria della Catena were badly damaged. The façade of the Palazzo Abbatelli was loosened, but can be secured; a large hall in the monastic building of La Gancia was destroyed and the collection of fourteenth century judicial records which it housed has suffered very severely. The two other most important civil buildings, the Palazzo Sclafani and the Palazzo Chiaramonte, escaped serious damage.

At Palermo, as throughout Sicily in general, the most numerous monuments are the late Renaissance and baroque churches; the damage under this heading is naturally more widespread but the loss is less, partly because buildings of the type are so common, more because they cannot always claim great artistic value. The little church of Sta. Maria di Piedigrotta is destroyed, as

is the Saledad. The churches of San Giuseppe dei Teatini, and San Salvatore, the Olivella, the over-ornate Casa Professa or Church of Gesu, and the (unimportant) Sta. Maria di Monserrato are all very badly damaged. The breaking of windows and roof tiles exposed to the weather the remarkable stucco decorations by Serpetta in the Oratories of San Lorenzo and Sta. Zita, but here only protection is required. The baroque monument of the Porta Felice had one of its pillars destroyed. Apart from these serious cases, nearly every church and most other buildings in Palermo needed minor repairs. Much of this work was taken in hand at once, and by the end of August repairs on a more extensive scale had been begun in the churches of San Francesco, San Giuseppe and San Salvatore.

Of modern buildings destroyed, the most to be regretted is the National Library with its fine reading-room; fortunately the books had been removed.

In Catania there were virtually no monuments of early date, the whole town having been rebuilt after a disastrous earthquake in 1693. The great baroque church of San Nicola has suffered very little, but a corner between the two cloister courts has been destroyed. The roof and part of the walling of San Domenico have perished. The church of San Gaetano has been completely destroyed. The

Minorite church has suffered and the altars are ruined; the Carmelite church has had an arcade of the south aisle blown out and the Franciscan church of the Immacolata has suffered damage to clerestory, roof and cupolas, on which repairs are in progress. Part of the roof of San Benedetto has given way owing to a bomb explosion in the south clerestory.

Messina, as the gateway of escape for the German garrison in Sicily, was a constant target for our bombers and suffered accordingly; but since the town was destroyed by an earthquake at the end of the eighteenth century and again by the eruption of Etna in 1908, few ancient monuments survived in it. The much-restored Cathedral has been very badly damaged; its early Gothic façade with its figures by Giovanni Battista Mazzolo is relatively unspoiled, but the apse with its fourteenth century mosaics has perished, as have the side chapels with the statues of the twelve Apostles by Montorsoli, and the roof of the nave has been burnt and has fallen in, probably ruining the tombs which were the chief treasure of the interior. The old Norman church of Sta. Annunziata dei Catalani was damaged by blast, but apart from some minor cracks in the walls appears to be structurally sound. The well-known fountain by Montorsoli in the Cathedral square had been

sandbagged and is intact.

At Taormina the Cathedral suffered but little hurt and the necessary repairs were taken in hand at once. One interesting building, the Palazzo del Duca di San Stefano, has actually benefited, for the destruction of houses surrounding it has left it open to view and quite unharmed. The Church and Convent of San Domenico (late fourteenth century, remodelled in 1670), familiar to many tourists as an hotel, was struck by a bomb and one wing of it was totally demolished. In this case our bombing was deliberate because the hotel served as Axis headquarters; it is reported that 150 German officers were killed when it was hit.

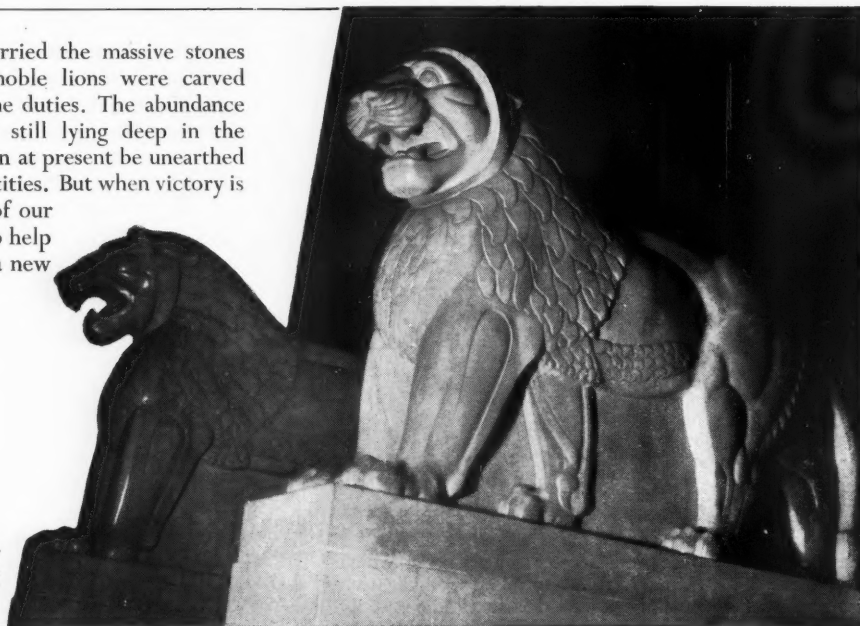
At Girgenti, the basilica of San Francesco, a building of no real artistic value, was completely ruined; fortunately the adjoining Capella di San Francesco, a fine example of "Sicilian Gothic," escaped damage. The mediaeval dormitory in the Convent of Santo Spirito and the Aula Capitolare have both suffered, but not irreparably; the structure and decoration are reported to be intact. In the modernised Cathedral of San Gerlando the early frescoes have been somewhat damaged by blast.

At Syracuse, a bomb has destroyed all but the façade of the Chiesa dei Miracoli, and another razed a corner of the Palazzo Beneventano.

[continued on page lii]

The men who quarried the massive stones from which these noble lions were carved are called to wartime duties. The abundance of 'Hopton-Wood' still lying deep in the Heart of England can at present be unearthed only in limited quantities. But when victory is won, this treasure of our land will be there to help grace the fabric of a new and better Britain.

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## *The New Horizon ...*



Original Painting by Anna Zinkeisen R.O.J.

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continued from page 1]

Slight damage to the Cathedral required no more than "first aid."

Of the smaller towns of Sicily, Randazzo, scene of some of the hardest fighting, has suffered most, and many of its mediæval houses are in ruins. The fourteenth-fifteenth century Church of Sta. Maria is still standing, but the roof was burned, the central apse has been holed, and the sacristy walls are damaged. San Nicola is badly ruined, and it is probable that the statue of the saint, a good work by Antonello Gagini, has perished. The remodelled church of San Martino has lost its roof, south side and cupola, but the thirteenth century campanile remains. The story, published in *The Times*, of there having been at Randazzo a deposit of art treasures which was destroyed with the town, seems to have no foundation in fact.

At Aderno, one church was destroyed, but as an art monument it possessed little interest. The "Chiesa Madre" at Agosta (also unimportant) suffered some damage, but in this seaport town looting by the inhabitants did as much harm as action by the armies. One church at Vizzini was damaged. At Caltanissetta, the church of S. Giacomo was twice hit, but the damage, mostly to the roof, is not serious and is being made good. Damage to other churches was mostly superficial. At Caltanissetta there were holes in the

roof of the nave and aisle of the Cathedral, endangering the (late) frescoes of the ceiling. At Enna, a bomb-hole in the roof of the "Chiesa Madre" has been repaired, to protect the fine wooden ceiling. Churches at Leonforte have suffered, one of them seriously, but they are not listed as architecturally important. At Assora, the Cathedral has lost roof and one transept wall—it is a mediæval building masked by provincial baroque work, with a fine fourteenth century wooden ceiling. The town of Troina, in which the Matrice Sta. Maria is of Norman foundation, has suffered severely.

Of the smaller works of art, pictures, museum objects, etc., the majority had been removed and put into storage, and they are believed to be safe, but it will take some time to unpack and check them.

It is not always easy to trace objects; thus, the Lascaris collection of Greek MSS. was removed from Palermo for safety, and its present whereabouts are in dispute; the famous crown of Catania has not been seen because it was walled-up and the hiding place has not been opened, but the walling at least is intact.

Both at Syracuse and Girgenti the museum buildings have been damaged but such antiques as had not been stored suffered very little. Some of the Nelson relics at Bronte were plundered by the Germans, who also

damaged some pictures stored in the museum at Messina and may have removed others. The large collection of Greek and other vases in the Museo Vagliasindi at Randazzo suffered much war damage but the gold objects and some of the best vases had been removed previously. At Catania, pictures, etc., had been looted from the Palazzo Biscari; none was of great value. The sacristy of the Church and Convent of S. Domenico at Agosta had been looted.

The Bordonara collection of pictures at Palermo is reported to be safe, as are the Flemish tapestries in the Cathedral at Marsala and the Della Robbia Madonna in the church of Sta. Maria di Gesù at Trapani; at Trapani too the Fardella library seems to have suffered no damage. Most of the books from the National Library at Palermo had been stored but the State archives were badly hit and the University Library was seriously damaged. Further reports on individual works of art will be forthcoming in due course.

#### Communist Party's Housing Memorandum

The Communist Party has issued a *Memorandum on Housing* (Communist Party, 16, King Street, W.C.2, 39 pages, price 9d.). Its practical housing policy is in many important respects similar to that proposed by

Lord Portal, the Minister of Works, in his speech in the Lords on the 8th February—the distinction between the long and the short term housing plans, the need for temporary housing under State ægis, and the call for standardisation. State ownership of land is, of course, demanded, and the Party believes "that the positive proposals of the Barlow, Scott and Uthwatt Reports, although useful in some respects, are totally inadequate to enable the community to deal with the housing problem both in cities and in the countryside."

There is surprisingly little said about credit and financial control, which is perhaps the key to all future development, and what is said appears to be remarkably orthodox. What, one wonders, would Marx and Lenin have thought of the proposal that money borrowed for housing should not, apparently, be created debt and interest free by the State but that the rate of interest on it should merely "be reduced." On financial matters, at least, the Social Creditors, among the more radical movements, seem to be far more direct, and it is interesting to compare this Communist memorandum with the Social Credit Party's proposals for financing housing and planning put forward in *Britain Rebuilt*, which was reviewed in the December 1942 issue of *THE ARCHITECTURAL REVIEW*.



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